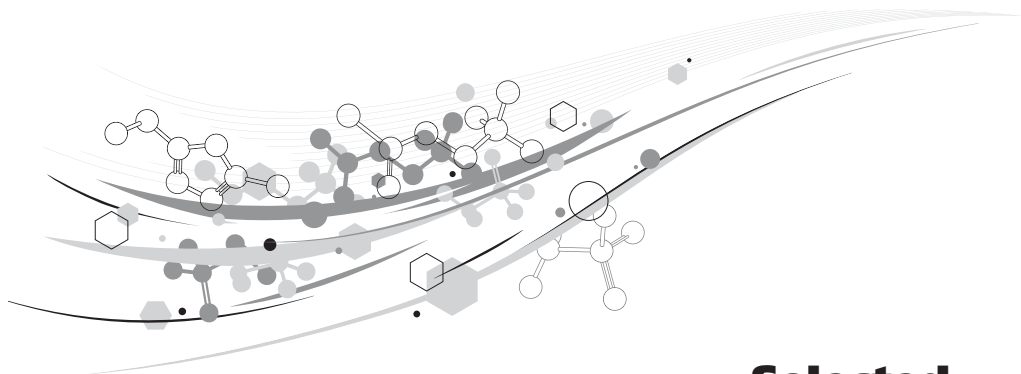




ADVANCED
Morpholine Analogues





Selected Building Block Series

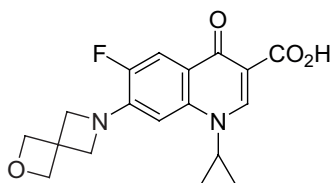
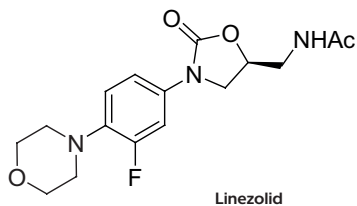
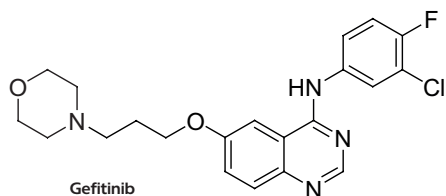
With development of on-line chemical directories acquiring necessary reagents and building blocks for day-to-day research activity has become a technical routine. Many thousands of building blocks are now available in the market and sub-structure search can efficiently provide a selection of reagents to buy. However, this approach might be limited.

With over 110,000 building blocks synthesized and now available from our stock we are a recognized leader in the market. Our catalogue features versatile building block classes and adds 1,000 products each month. Although they all are available for purchase through www.enaminestore.com and many public or corporate chemical databases we wanted to gather together the most interesting and recently prepared building blocks to provide a series of useful guides to a novel and innovative chemistry.

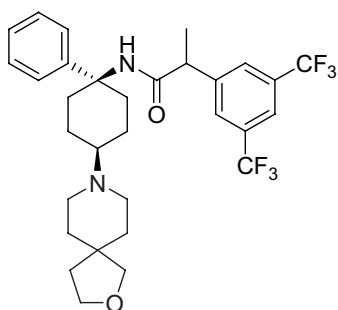
Advanced Morpholine Analogues

Essential features of morpholine making this alicyclic amine a useful tool to modulate drug properties can be enhanced and finely tuned through its ring restriction or displacing oxygen within the new rigid and variously shaped frameworks.¹⁻⁴

Over 1,000 substituted morpholines and their analogues are available from Enamine. They include building blocks whose value has been already proved by synthesis of biologically active molecules, and their recently synthesized analogues potential of which is yet to be explored.



Active antibacterial agent



Potent antagonis of NK₁


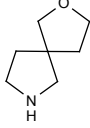

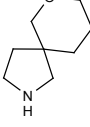

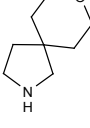
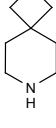
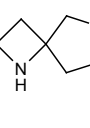
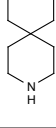
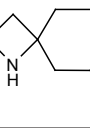
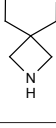
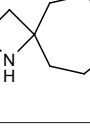
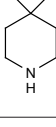
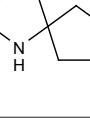


¹ J. A. Burkhard et al. *Ang. Chem. Int. Ed.* **2010**, *49*, 3524.

² R. R. Dandu et al. *Bioorg. Med. Chem. Lett.* **2012**, *22*, 2151.

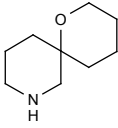
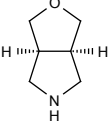
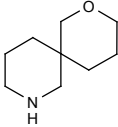
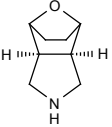
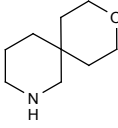
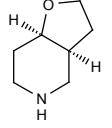
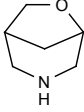
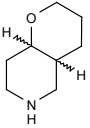
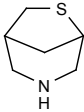
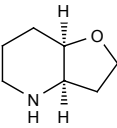
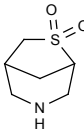
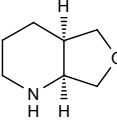
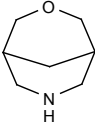
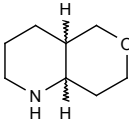
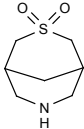
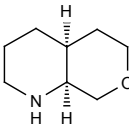
³ L. C. Cooper et al. *Bioorg. Med. Chem. Lett.* **2002**, *12*, 1759.

⁴ X. A. Fong et al. *J. Med. Chem.* **2012**, *5*, 7667

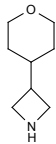
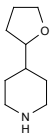
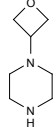
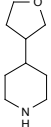
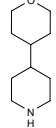
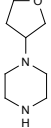
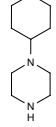
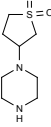
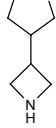
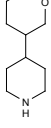
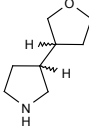
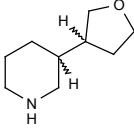
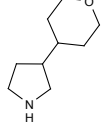
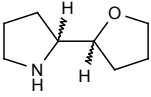
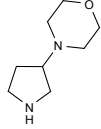
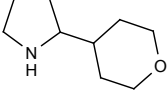
Spiro analogues of morpholine

<p>EN300-81038</p> <p>$\frac{1}{2} \text{H}_2\text{C}_2\text{O}_4$</p>		<p>EN300-105822</p>	
<p>EN300-134521</p> <p>$\frac{1}{2} \text{H}_2\text{C}_2\text{O}_4$</p>		<p>EN300-205914</p>	
<p>EN300-113203</p> <p>HCl</p>		<p>EN300-96084</p>	
<p>EN300-134826</p> <p>$\text{H}_2\text{C}_2\text{O}_4$</p>		<p>EN300-187643</p>	
<p>EN300-88621</p>		<p>EN300-99316</p>	
<p>EN300-208935</p> <p>HCl</p>		<p>EN300-102855</p>	
<p>EN300-200823</p>		<p>EN300-200454</p>	
<p>EN300-149639</p>		<p>EN300-123162</p> <p>HCl</p>	

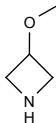

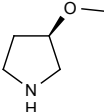

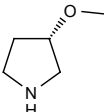
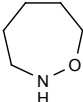
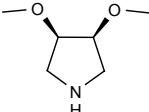
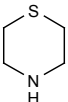
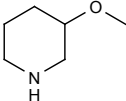
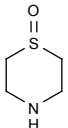
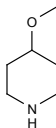
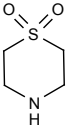
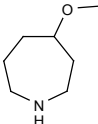
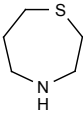
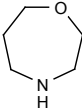
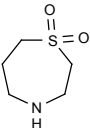
Spiro, bridged and fused analogues of morpholine

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<p>EN300-97807</p>		<p>EN300-93931</p>	
<p>EN300-188101</p> <p>HCl</p>		<p>EN300-185758</p> <p>HCl racemic</p>	
<p>EN300-133936</p> <p>HCl</p>		<p>EN300-110343</p> <p>2 isomers</p>	
<p>EN300-213268</p> <p>HCl</p>		<p>EN300-191935</p> <p>HCl racemic</p>	
<p>EN300-188873</p> <p>HCl</p>		<p>EN300-202276</p> <p>HCl racemic</p>	
<p>EN300-95115</p> <p>CH₃COOH</p>		<p>EN300-102280</p> <p>HCl 2 isomers</p>	
<p>EN300-182972</p>		<p>EN300-210091</p> <p>HCl racemic</p>	

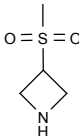
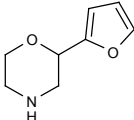
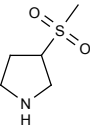
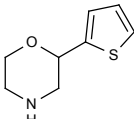
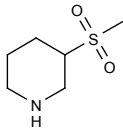
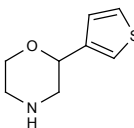
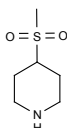
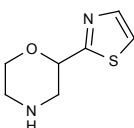
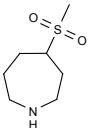
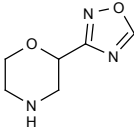
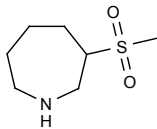
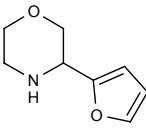
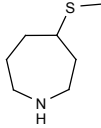
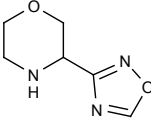
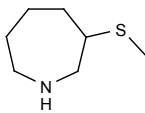
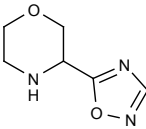
Linked analogues of morpholine

<p>EN300-201089</p> <p>HCl</p>		<p>EN300-155697</p>	
<p>EN300-124394</p> <p>2 CF₃COOH</p>		<p>EN300-132896</p> <p>HCl</p>	
<p>EN300-116514</p>		<p>EN300-106464</p> <p>2HCl</p>	
<p>EN300-98471</p>		<p>EN300-13307</p> <p>2HCl</p>	
<p>EN300-191423</p> <p>HCl</p>		<p>EN300-128047</p>	
<p>EN300-115251</p> <p>2 isomers</p>		<p>EN300-114659</p> <p>HCl</p> <p>2 isomers</p>	
<p>EN300-118087</p>		<p>EN300-204317</p> <p>2 isomers</p>	
<p>EN300-68735</p>		<p>EN300-126977</p> <p>HCl</p>	

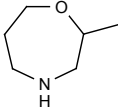
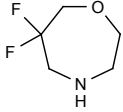
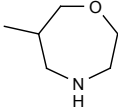
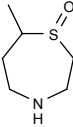
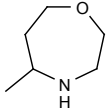
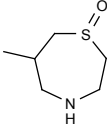
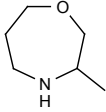
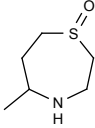
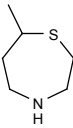
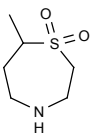
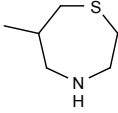
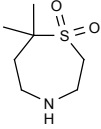
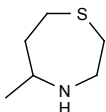
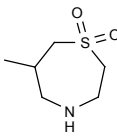
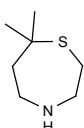
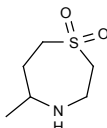
Diverse analogues of morpholine

EN300-75420		EN300-131366	
HCl		HCl	
EN300-99593		EN300-170086	
HCl		HCl	
EN300-99596		EN300-173715	
HCl		HCl	
EN300-178921		EN300-33437	
HCl		HCl	
EN300-123494		EN300-69588	
HCl		HCl	
EN300-24135		EN300-67050	
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EN300-130660		EN300-54917	
HCl		HCl	
EN300-101939		EN300-73620	
HCl		HCl	

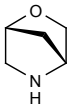
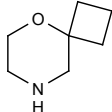
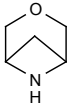
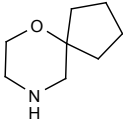
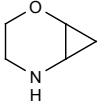
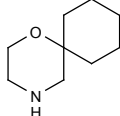
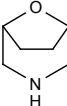
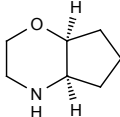
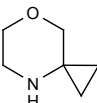
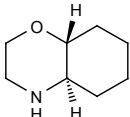
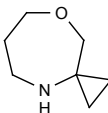
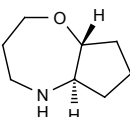
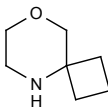
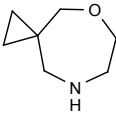
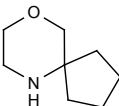
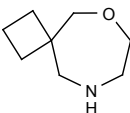
Diverse analogues of morpholine

<p>EN300-123706</p> <p>HCl</p>		<p>EN300-103186</p>	
<p>EN300-200609</p> <p>HCl</p>		<p>EN300-107846</p>	
<p>EN300-133818</p>		<p>EN300-106628</p>	
<p>EN300-108169</p> <p>HCl</p>		<p>EN300-63828</p>	
<p>EN300-201423</p> <p>HCl</p>		<p>EN300-131690</p> <p>HCl</p>	
<p>EN300-182923</p> <p>HCl</p>		<p>EN300-74368</p>	
<p>EN300-194784</p>		<p>EN300-122849</p> <p>HCl</p>	
<p>EN300-113480</p>		<p>EN300-207111</p> <p>CF₃COOH</p>	

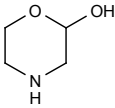
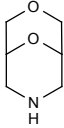
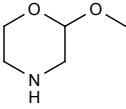
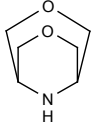
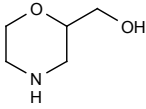
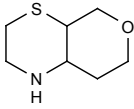
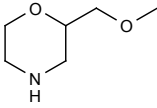
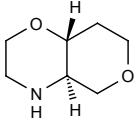
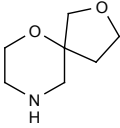
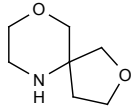
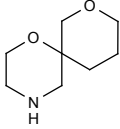
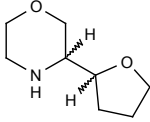
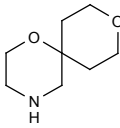
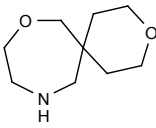
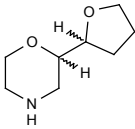
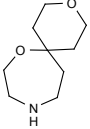
Homomorpholines and analogues

EN300-66149		EN300-211815	
EN300-117105		EN300-179512	
EN300-126113		EN300-180571	
EN300-114127		EN300-180573	
EN300-179167		EN300-179505	
EN300-178524		EN300-184417	
EN300-177621		EN300-180532	
EN300-188088		EN300-180575	

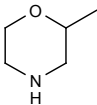
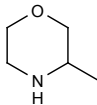
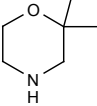
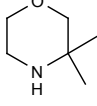
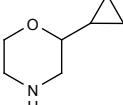
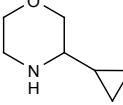
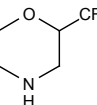
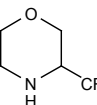
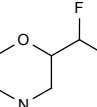
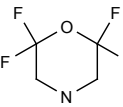
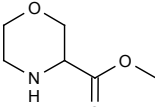
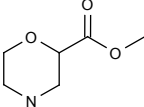
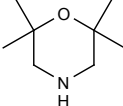
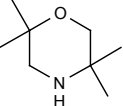
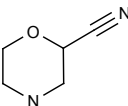
Bicyclic morpholines

<p>EN300-93028</p> <p>HCl</p>		<p>EN300-122734</p>	
<p>EN300-82707</p>		<p>EN300-110174</p>	
<p>EN300-90209</p>		<p>EN300-42970</p>	
<p>EN300-82709</p>		<p>EN300-196540</p> <p>HCl racemic</p>	
<p>EN300-204321</p> <p>HCl</p>		<p>EN300-43458</p> <p>racemic</p>	
<p>EN300-209173</p> <p>HCl</p>		<p>EN300-200671</p> <p>racemic</p>	
<p>EN300-114690</p>		<p>EN300-131681</p>	
<p>EN300-121878</p>		<p>EN300-135658</p>	

Analogues of morpholines with two atoms of oxygen

<p>EN300-108149</p> <p>HCl</p>		<p>EN300-194132</p> <p>HCl</p>	
<p>EN300-108507</p> <p>HCl</p>		<p>EN300-119630</p>	
<p>EN300-101373</p>		<p>EN300-111660</p>	
<p>EN300-85707</p>		<p>EN300-124908</p> <p>HCl racemic</p>	
<p>EN300-136051</p>		<p>EN300-125379</p>	
<p>EN300-194602</p>		<p>EN300-208425</p> <p>2 isomers</p>	
<p>EN300-111595</p>		<p>EN300-134243</p>	
<p>EN300-104518</p> <p>2 isomers</p>		<p>EN300-140486</p>	

Substituted morpholines

<p>EN300-25429</p>		<p>EN300-35609</p>	
<p>EN300-37404</p>		<p>EN300-193421</p> <p>HCl</p>	
<p>EN300-89665</p>		<p>EN300-120234</p>	
<p>EN300-81684</p> <p>HCl</p>		<p>EN300-83298</p> <p>HCl</p>	
<p>EN300-73253</p>		<p>EN300-52620</p>	
<p>EN300-95388</p> <p>HCl</p>		<p>EN300-68567</p> <p>HCl</p>	
<p>EN300-170553</p>		<p>EN300-78116</p> <p>HCl</p>	
<p>EN300-70489</p> <p>HCl</p>		<p>EN300-90478</p>	