

## Dynamin

Dynamins are large superfamily GTPase proteins that are involved in various cellular processes including budding of transport vesicles, division of organelles, cytokinesis, and pathogen resistance. Dynamins are involved in scission (cleavage of the vesicle from the parent membrane) of nascent vesicles from parent membranes in eukaryotic cells. Dynamins interact directly with the lipid bilayer at the necks of clathrin-coated pits to sever and release coated vesicles. Dynamins contain five domains, including GTPase domain, middle domain, PH domain, GTPase effector domain (GED), and proline rich domain (PRD), while the dynamin-related proteins (DRPs) lack one or more of these domains or have additional domains. Dynamins and DRPs participate in a wide variety of cellular processes, including budding mitochondrial fission (mammalian Dlp1 and Saccharomyces cerevisiae Dnm1) and fusion (mammalian OPA1, S.cerevisiae Mgm1 and Schizosaccharomycespombe Msp1), vacuolar fission (S. cerevisiae Vps1), interferon-induced anti-viral protection (fish Mx proteins), plant cell cytokinesis and membrane fission (Arabidopsis thalianaDRP proteins), as well as pathogen resistance.

## **Dynamin Inhibitors**

Drp1-IN-1		Dynamin inhibitory peptide	
Drp1-IN-1 (comp A-7) is a <b>dynamin-1-like</b> <b>protein (Drp1)</b> inhibitor, with an $IC_{so}$ of 0.91 $\mu$ M.		Dynamin inhibitory peptide competitively blocks binding of <b>dynamin</b> to amphiphysin, thus preventing endocytosis. Dynamin inhibitory peptide blocks the dopamine D3 effect on GABAA receptors.	Cat. NO.: HY-P1083
Clinical Data: No Development Reported Size: 5 mg, 10 mg	" <sub>N</sub> -NH	Clinical Data: No Development Reported Size: 1 mg, 5 mg	0
Dynamin inhibitory peptide TFA	<b>Cat. No.:</b> HY-P1083A	DynaMin inhibitory peptide, myristoylated	<b>Cat. No.</b> : HY-P1369
Dynamin inhibitory peptide TFA competitively blocks binding of <b>dynamin</b> to amphiphysin, thus preventing endocytosis. Dynamin inhibitory peptide TFA blocks the dopamine $D_3$ effect on GABA <sub>A</sub> receptors.		DynaMin inhibitory peptide, myristoylated is a DynaMin inhibitor to interfere with the binding of amphiphysin with dynamin. DynaMin inhibitory peptide, myristoylated is a membrane-permeant form of the peptide that prevents endocytosis.	Myristoyl-QVPSRPNRAP-NH <sub>2</sub>
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg	MAS - FF OH	Purity:>98%Clinical Data:No Development ReportedSize:5 mg, 10 mg, 25 mg	
DynaMin inhibitory peptide, myristoylated TFA	<b>Cat. No.:</b> HY-P1369A	Dynasore	<b>Cat. No.</b> : HY-15304
DynaMin inhibitory peptide, myristoylated TFA is a <b>DynaMin</b> inhibitor to interfere with the binding of amphiphysin with dynamin. DynaMin inhibitory peptide, myristoylated TFA is a membrane-permeant form of the peptide that prevents endocytosis.	Myriatoyi-QVPSRPNRAP-NH <sub>2</sub> (TFA sall)	Dynasore is a cell-permeable $dynamin$ inhibitor with an $IC_{s0}$ of 15 $\mu M.$	и мультори Н Он
Purity:>98%Clinical Data:No Development ReportedSize:1 mg, 5 mg		Purity:98.70%Clinical Data:No Development ReportedSize:10 mM × 1 mL, 10 mg, 50 mg	
Dynole 2–24	<b>Cat. No.:</b> HY-145080	Dynole 34-2	<b>Cat. No.</b> : HY-107545
Dynole 2–24 is an indole-based <b>dynamin GTPase</b> inhibitor (IC <sub>so</sub> =0.56 $\mu$ M for dynamin I). Dynole 2–24 is nontoxic and shows increased potency against dynamin I and II in vitro and in cells (IC <sub>w(CME)</sub> =1.9 $\mu$ M). Dynole 2–24 also shows 4.4-fold selectivity for dynamin I. <b>Purity:</b> >98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg		Dynole 34-2 is a <b>dynamin GTPase</b> inhibitor (IC <sub>50</sub> 5=6.9 and 14.2 μM for dynamin1 and dynamin2 GTPase activity, respectively) with antimitotic effect. Dynole 34-2 induces apoptosis, as revealed by cell blebbing, DNA fragmentation, and PARP cleavage. Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg	). 
Hydroxy-Dynasore (Dyngo-4a)	<b>Cat. No.:</b> HY-13863	Mdivi-1 (Mitochondrial division inhibitor 1)	<b>Cat. No.</b> : HY-15886
Hydroxy Dynasore (Dyngo-4a), a structural analog of Dynasore (HY-15304), is an potency improved, low cytotoxicity and nonspecific binding <b>dynamin</b> inhibitor with <b>IC</b> <sub>50</sub> values of 0.38 $\mu$ M and 2.3 $\mu$ M for brain dynamin I and recombinant rat dynamin II, respectively. <b>Purity:</b> 98.08%	CTC H N OH OH OH	Mdivi-1 is a selective dynamin-related protein 1 (Drp1) inhibitor. Mdivi-1 is a mitochondrial division/mitophagy inhibitor. Purity: 99.73%	
Clinical Data:No Development ReportedSize:10 mM × 1 mL, 10 mg, 50 mg, 100 mg		Clinical Data: No Development Reported   Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg	

Schaftoside			
		Cat. No.: HY-N0703	
Schaftoside is a flavonoid found in a variety of Chinese herbal medicines, such as Eleusine indica. Schaftoside inhibits the expression of TLR4 and Myd88. Schaftoside also decreases Drp1 expression and phosphorylation, and reduces mitochondrial fission.			
Purity:	99.88%	но	
Clinical Data:	No Development Reported		
Size:	10 mM × 1 mL, 5 mg, 10 mg, 20 mg		