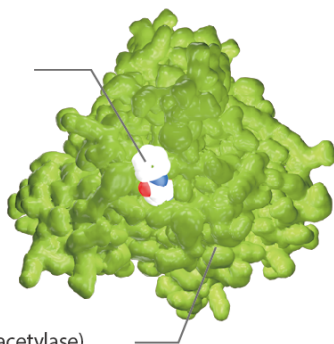


Myosin

HDAC Inhibitor:
Vorinostat (SAHA)



HDAC (Histone deacetylase)

Myosin light chain kinase (MLCK) is a ubiquitous Ca^{2+} /calmodulin (CaM)-activated kinase found in smooth, cardiac, and skeletal muscle as well as in mammalian nonmuscle cells.

Myosin light chain kinase (MLCK) is a regulatory protein for smooth muscle contraction, which acts by phosphorylating 20-kDa myosin light chain (MLC20) to activate the myosin ATPase activity. Myosin light chain kinase (MLCK) of smooth muscle has been purified as an enzyme that phosphorylates 20-kDa light chain of smooth muscle myosin (MLC20).

Analysis of the cross talk between Ras-ERK and PI3K-AKT signaling pathways reveals integrin $\beta 1$, myosin light chain kinase (MLCK) and

myosin IIA are required for the activation of PI3K-AKT following inhibition of the Ras-ERK pathway. Integrin $\beta 1$, MLCK, and myosin IIA are factors in the development of resistance to MEK inhibitors.

Myosin light chain kinase (MLCK) phosphorylates the regulatory light chain (RLC) of myosin producing increases in force development during skeletal muscle contraction.

Myosin Inhibitors & Modulators

<p>(-)-Blebbistatin (S)-(-)-Blebbistatin) Cat. No.: HY-13441</p> <p>Bioactivity: (-)-Blebbistatin is an S enantiomer of blebbistatin. Blebbistatin is a potent and selective myosin II inhibitor with IC₅₀s ranging from 0.5 to 5 μM.</p> <p>Purity: 99.42% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg</p> 	<p>ATM-3507 Cat. No.: HY-100948</p> <p>Bioactivity: ATM-3507 is a potent tropomyosin inhibitor with IC₅₀s from 3.83-6.84 μM in human melanoma cell lines.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 250 mg, 500 mg</p> 
<p>BTS (N-Benzyl-p-toluenesulfonamide; N-Tosylbenzylamine) Cat. No.: HY-16690</p> <p>Bioactivity: BTS is a potent inhibitor of Ca²⁺-stimulated myosin S1 ATPase (IC₅₀ ~ 5 μM) and reversibly blocks the gliding motility.</p> <p>Purity: 99.78% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 500 mg</p> 	<p>HA-100 Cat. No.: HY-100984</p> <p>Bioactivity: HA-100 is an inhibitor of cGMP-dependent protein kinase (PKG), cAMP-dependent protein kinase (PKA), Protein kinase C (PKC) and MLC-kinase with IC₅₀s of 4, 8, 12 and 240 μM, respectively.</p> <p>Purity: 99.76% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p> 
<p>Mavacamten (MYK461; SAR439152) Cat. No.: HY-109037</p> <p>Bioactivity: Mavacamten is a modulator of cardiac myosin, with IC₅₀s of 490, 711 nM for bovine cardiac and human cardiac, respectively.</p> <p>Purity: 99.94% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 1 mg, 5 mg</p> 	<p>ML-7 hydrochloride Cat. No.: HY-15417</p> <p>Bioactivity: ML-7 hydrochloride is a naphthalene sulphonamide derivative, potently inhibits MLCK (IC₅₀=300 nM) and TRPC6 channel (IC₅₀>10 μM).</p> <p>Purity: 98.18% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 10 mg, 50 mg</p> 
<p>MLCK inhibitor peptide 18 Cat. No.: HY-P1029</p> <p>Bioactivity: MLCK inhibitor peptide 18 is a myosin light chain kinase (MLCK) inhibitor with an IC₅₀ of 50 nM, and inhibits CaM kinase II only at 4000-fold higher concentrations.</p> <p>Purity: 98.71% Clinical Data: No Development Reported Size: 1 mg, 5 mg, 10 mg, 25 mg</p> <p style="text-align: center;">RKKYKYRRK-NH₂</p>	<p>MS-444 (BE-34776) Cat. No.: HY-100685</p> <p>Bioactivity: MS-444 inhibits the activity of purified smooth muscle myosin light chain kinase (MLCK) with an IC₅₀ value of 10 μM.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 250 mg, 500 mg</p> 
<p>Omecamtiv mecarbil (CK-1827452) Cat. No.: HY-14233</p> <p>Bioactivity: Omecamtiv mecarbil is a cardiac myosin activator.</p> <p>Purity: 99.28% Clinical Data: Phase 3 Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg</p> 	<p>para-Nitroblebbistatin Cat. No.: HY-120870</p> <p>Bioactivity: para-Nitroblebbistatin is a non-cytotoxic, photostable, fluorescent and specific Myosin II inhibitor, used in the study of the specific role of myosin II in physiological, developmental, and cell biological studies ^[1].</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 250 mg, 100 mg, 500 mg</p> 