

32-12258: Human Myostatin

Gene : MSTN
Gene ID : 2660
Uniprot ID : O14793(267-375)
Alternative Name : Growth/differentiation factor 8, Myostatin

Description

Source: Genetically modified E.coli.

Predicted MW: Dimer, 12.4/24.8 kDa (109/218 aa)

Myostatin, also known as GDF-8, is a conserved member of the TGF-beta superfamily. Myostatin is an essential regulator of skeletal muscle mass and cardiac muscle development and function. Myostatin is a secreted protein that negatively regulates skeletal muscle growth by determining muscle fiber number and size. Myostatin binds one of the two activin type II receptors (ACTRIIA or ACTRIIB) to activate SMAD signaling. Myostatin also activates MAPK signaling through TAK1-MKK6 and Ras pathways. Inhibition of myostatin increases muscle mass in a number of human disease animal models, such as muscular dystrophy.

Product Info

Amount : 10 µg / 100 µg
Purification : Reducing and Non-Reducing SDS PAGE at $\geq 95\%$
Content : Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
Sterile 20 mM HCl at 0.1 mg/mL
Storage condition : Store at -20°C
Amino Acid : DFGLDCCDEHS TESRCCRYPL TVDFEAFGWD WIIAPKRYKA NYCSGECEFV FLQKYPHTHL VHQANPRGSA GPCCTPTKMS PINMLYFNGK EQIYGYKIPA MVDRCGCS

Application Note

Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

Biological Activity was determined by MPC-11 cell cytotoxicity at ≤ 50 ng/ml; $\geq 2.0 \times 10^4$ units/mg. Centrifuge vial before opening, Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws. Upon reconstitution, a small amount of visible precipitate can be expected. A 10% overfill has been added to the total material vial to compensate for this loss.



