

# Recombinant Human Growth Differentiation Factor-8 (rh GDF-8 / Myostatin Propeptide)

**Synonyms:** MSTN, MSTN Muscle Hypertrophy.

**Introduction:** Myostatin (GDF-8), a member of the TGFbeta superfamily, is a potent and specific negative regulator of skeletal muscle mass. In serum, myostatin circulates as part of a latent complex containing myostatin propeptide and/or follistatin-related gene. The myostatin propeptide is known to bind and inhibit myostatin in vitro. This interaction is relevant in vivo, with a majority (>70%) of myostatin in serum bound to its propeptide. The myostatin propeptide is negative regulator of myostatin in vivo.

**Description:** Recombinant Human GDF-8 is a 27.8kDa protein containing 244 amino acid residues of the human Myostatin Propeptide.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilized with no additives  
The samples of 1µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized Myostatin Propeptide in sterile 20mM HCl at 0.1 mg/ml, which can then be further diluted to other aqueous solutions. Please prevent freeze-thaw cycles. Reconstituted protein can be stored at 4°C for a limited period of time.

**Stability:** Lyophilized rh GDF-8 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** Greater than 95.0% as determined by SDS-PAGE.

## Amino acid sequence:

MNENSEQKE NVEKEGLCNA CTWRQNTKSS RIEAIKIQL SKLRLETAPN ISKDVIQQL PKAPPLRELI  
DQYDVQRDDS SDGSLEDDDY HATTETIITM PTESDFLMQV DGKPKCCFFK FSSKIQYNKV VKAQLWIYLR  
PVETPTTVFV QILRLIKPMK DGTRYTGIRS LKLDMNPGTG IWQSIDVKT V LQNWLKQPES NLGIEIKALD  
ENGHDLAVTF PGPGEDGLNP FLEVKVTDTP KRSRR.

**Biological Activity:** The protein has full biological activity when compared to a standard. The activity is determined by its ability to inhibit 50ng/ml of Myostatin on MPC-11 cells and is typically 0.13-0.2 µg/ml.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	11343470
<i>medium</i>	25 µg	Cat.N°	11343474

**ImmunoTools** Excellent Quality - Advantageously priced

Gladiolenweg 2; 26169 Friesoythe; Germany  
phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, [info@immunotools.com](mailto:info@immunotools.com)  
[www.immunotools.com](http://www.immunotools.com)