

## 42980 Recombinant Mouse Growth Differentiation Factor 15 (hGDF15)

**Source:** Expressed in *E.coli*  
**Tag:** N-terminal 6xHis  
**Size:** 100µg  
**Purity:** >95%, determined by SDS-PAGE  
**Endotoxin Level:** <0.2EU/µg, determined by LAL Test  
**Other Names:** MIC-1, PDF, NAG-1

### Introduction to the Molecule

GDF-15 belongs to the transforming growth factor  $\beta$  superfamily. It is synthesized as a 62-kDa precursor protein, which, after cleavage by furin-like protease, is secreted as 25-kDa disulfide-linked dimer. GDF15 is an important regulator of appetite and energy homeostasis. It exerts its effects via its receptor called glial-derived neurotrophic factor (GDNF) receptor alpha-like (GFRAL).

### Amino Acid Sequence

**MRGSHHHHHHGMASMTGGQQMGRDLY**  
**DDDDKDRWGS****ENLYFQG**SAHAHPRDSCP  
 LGPGRCCCHLETVQATLEDLGWSDWVLSRQL  
 QLSMCVGECPHLYRSANTHAQIKARLHGLQP  
 DKVPAPCCVPSSYTPVVLHRTDSGVSLQTYD  
 DLVARGCHCA

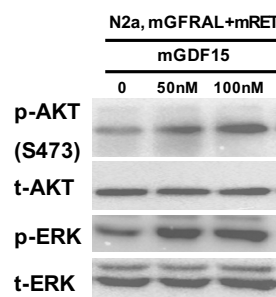
**Note:** **6xhis tag**, **EK cleavage site** and **TEV site** are highlighted

### Formulation, Reconstitution and Storage

- Lyophilized at 1 mg/mL in Tris 50mM glycerol 20% (v/v), pH 8.0.
- Add deionized water to prepare a working stock solution of approximately 1 mg/mL and let the lyophilized pellet dissolve completely.
- Store lyophilized protein at -20°C. Aliquot reconstituted protein and store at -80°C. Avoid repeated freezing/thawing cycles.

### Bioactivity Test

Recombinant mGDF15 is able to activate AKT phosphorylation in N2a cells stably expressing GFRAL and RET, which are receptor and co-receptor of GDF15.



### SDS-PAGE Gel

