

# Recombinant human GFR alpha-1 protein

Catalog Number: ATGP4154

## PRODUCT INFORMATION

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### Expression system

HEK293

### Domain

25-424aa

### UniProt No.

P56159

### NCBI Accession No.

NP\_665736.1

### Alternative Names

GDNF family receptor alpha-1 isoform b, GDNF receptor alpha-1, GDNF R alpha-1, GFR alpha1, GFR-ALPHA-1, GFRa-1, GFRalpha-1, GFRA1, GDNFR, GDNFRA, RET1L, RETL1, TRNR1, RHDA4, RET ligand, TGF-beta-related neurotrophic factor receptor 1

## PRODUCT SPECIFICATION

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### Molecular Weight

70.8 kDa (633aa)

### Concentration

0.5 mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 90% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Tag

hIgG-Tag

### Application

SDS-PAGE, Bioactivity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

GFR alpha-1, also known as GDNF family receptor alpha-1, belongs to the GDNFR family. It is a glycosylphosphatidylinositol (GPI)-linked receptor found on the cell surface, acting as a receptor for both GDNF

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and NTN and function as neurotrophic factors for a variety of neuronal populations in the central and peripheral nervous systems. It binds GDNF strongly and activates RET tyrosine kinase and is also essential for the development of kidneys and the enteric nervous system. Recombinant human GFR alpha-1, fused to a hlgG-tag at C-terminus, was expressed in HEK293 cells and purified by using conventional chromatography techniques.

## Amino acid Sequence

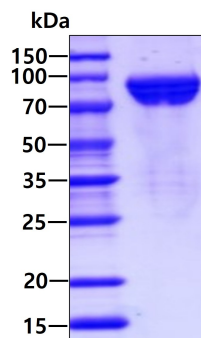
DRLDCVKASD QCLKEQSCST KYRTLRCQVA GKETNFSLAS GLEAKDECERS AMEALKQKSL YNCRCKRGMK KEKNCLRIYW  
SMYQSLQGND LLEDSPYEPV NSRLSDIFRV VPFISVEHIP KGNNCLDAK ACNLDDICKK YRSAYITPCT TSVSNDVCNR  
RKCHKALRQF FDKVPAKHSY GMLFCSCRDI ACTERRRQTI VPVCSYEERE KPNCLNLQDS CKTNYICRSR LADFFTNCQP  
ESRSVSSCLK ENYADCLLAY SGLIGTVMTP NYIDSSSLSV APWCDCSNSG NDLEECLKFL NFFKDNTCLK NAIQAFGNGS  
DVTVWQPAFP VQTTTATTTT ALRVKNKPLG PAGESNEIPT HVLPPCANLQ AQLKSNVSG NTHLCISNGN YEKEGLGASS  
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QYNSTYRVVS VLTVLHQDWL NGKEYKCKVS NKALPAPIEK TISKAKGQPR EPQVYTLPPS RDELTKNQVS LTCLVKGFYP  
SDIAVEWESN GQPENNYKTT PPVLDSGGSF FLYSKLTVDK SRWQQGNVFS CSVMHEALHN HYTKLSLSL PGK>

## General References

- Thompson, J. et al. (1998) Mol. Cell Neurosci. 11:117-126.  
Baloh, R.H. et al. (1998) Proc. Natl. Acad. Sci. USA 95:5801-5806.  
Jing S, et al. (1996). Cell. 85:1113-1124.  
Treanor JJ, et al. (1996). 382: 80-83.  
Jing S, et al. (1997). J Biol Chem. 272: 33111-33117.

## DATA

### SDS-PAGE



3 µg by SDS-PAGE under reducing condition and visualized by coomassie blue stain

### Biological Activity

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