PRODUCT INFORMATION

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, GFRa1, GFRA1, GDNFR, GDNFRA, RET1L, RETL1, TRNR1, RHDA4, RET ligand, TGF-beta-related neurotrophic factor receptor 1

PRODUCT SPECIFICATION

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)

Biological Activity

Measured by its binding ability in a functional ELISA with Human GDNF (CAT# ATGP3942). The ED50 range \leq 50 ng/ml.

Tag

hlgG-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

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

Amino acid Sequence

DRLDCVKASD QCLKEQSCST KYRTLRQCVA GKETNFSLAS GLEAKDECRS AMEALKQKSL YNCRCKRGMK KEKNCLRIYW SMYQSLQGND LLEDSPYEPV NSRLSDIFRV VPFISVEHIP KGNNCLDAAK ACNLDDICKK YRSAYITPCT TSVSNDVCNR RKCHKALRQF FDKVPAKHSY GMLFCSCRDI ACTERRRQTI VPVCSYEERE KPNCLNLQDS CKTNYICRSR LADFFTNCQP ESRSVSSCLK ENYADCLLAY SGLIGTVMTP NYIDSSSLSV APWCDCSNSG NDLEECLKFL NFFKDNTCLK NAIQAFGNGS DVTVWQPAFP VQTTTATTTT ALRVKNKPLG PAGSENEIPT HVLPPCANLQ AQKLKSNVSG NTHLCISNGN YEKEGLGASS <LEPKSCDKTH TCPPCPAPEL LGGPSVFLFP PKPKDTLMIS RTPEVTCVVV DVSHEDPEVK FNWYVDGVEV HNAKTKPREE QYNSTYRVVS VLTVLHQDWL NGKEYKCKVS NKALPAPIEK TISKAKGQPR EPQVYTLPPS RDELTKNQVS LTCLVKGFYP SDIAVEWESN GQPENNYKTT PPVLDSDGSF FLYSKLTVDK SRWQQGNVFS CSVMHEALHN HYTQKSLSLS 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



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

Biological Activity

NKMAXBiO We support you, we believe in your research Recombinant human GFR alpha-1 protein

Catalog Number: ATGP4154

Human GDNF (CAT# ATGP3942) is coated at 0.5 ug/ml (100 ul/well) can bind Human GFR alpha-1. The ED50 range \leq 50 ng/ml.



