

## GFRA1/GDNFR-alpha-1 Protein, Rat (HEK293, Fc)

<b>Cat. No.:</b>	HY-P76948
<b>Synonyms:</b>	GFR $\alpha$ 1; GDNF Family Receptor Alpha-1; GFR-Alpha-1; RET Ligand 1; GDNFRA; RETL1; TRNR1
<b>Species:</b>	Rat
<b>Source:</b>	HEK293
<b>Accession:</b>	Q62997 (M1-L445)
<b>Gene ID:</b>	25454
<b>Molecular Weight:</b>	Approximately 85 kDa

### PROPERTIES

<b>AA Sequence</b>	<pre> M F L A T L Y F A L   P L L D L L M S A E   V S G G D R L D C V   K A S D Q C L K E Q S C S T K Y R T L R   Q C V A G K E T N F   S L T S G L E A K D   E C R S A M E A L K Q K S L Y N C R C K   R G M K K E K N C L   R I Y W S M Y Q S L   Q G N D L L E D S P Y E P V N S R L S D   I F R A V P F I S D   V F Q Q V E H I S K   G N N C L D A A K A C N L D D T C K K Y   R S A Y I T P C T T   S M S N E V C N R R   K C H K A L R Q F F D K V P A K H S Y G   M L F C S C R D I A   C T E R R R Q T I V   P V C S Y E E R E R P N C L S L Q D S C   K T N Y I C R S R L   A D F F T N C Q P E   S R S V S N C L K E N Y A D C L L A Y S   G L I G T V M T P N   Y V D S S S L S V A   P W C D C S N S G N D L E D C L K F L N   F F K D N T C L K N   A I Q A F G N G S D   V T M W Q P A P P V Q T T T A T T T T A   F R V K N K P L G P   A G S E N E I P T H   V L P P C A N L Q A Q K L K S N V S G S   T H L C L S D S D F   G K D G L A G A S S   H I T T K S M A A P P S C S L           </pre>
<b>Biological Activity</b>	Immobilized rat His-GDNF (78-211) at 10 $\mu$ g/mL (100 $\mu$ l/well) can bind rat GFRA1-Fc, The EC <sub>50</sub> of rat GFRA1-Fc is 20-46.6 ng/mL.
<b>Appearance</b>	Solution
<b>Formulation</b>	Supplied as a 0.2 $\mu$ m filtered solution of PBS, pH 7.4.
<b>Endotoxin Level</b>	<1 EU/ $\mu$ g, determined by LAL method.
<b>Reconstitution</b>	N/A
<b>Storage &amp; Stability</b>	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
<b>Shipping</b>	Shipping with dry ice

## DESCRIPTION

### Background

GFRA1/GDNFR-alpha-1 Protein serves as a receptor for GDNF and plays a crucial role in mediating the GDNF-induced autophosphorylation and activation of the RET receptor. It is proposed that two molecules of GDNFR-alpha-1 form a complex with the disulfide-linked GDNF dimer and two molecules of RET, suggesting a coordinated mechanism for signal transduction. GFRA1 interacts with RET, facilitating the intricate signaling pathways associated with GDNF-induced responses. Additionally, GFRA1 engages in interactions with SORL1, either alone or in a complex with GDNF. This interaction results in the internalization of GFRA1, without leading to its degradation, indicating a regulatory aspect of GFRA1 dynamics. These molecular interactions highlight the multifaceted role of GFRA1 in mediating GDNF signaling and emphasize its importance in cellular processes.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA