

**DESCRIPTION**

<b>Source</b>	Chinese Hamster Ovary cell line, CHO-derived mouse GFR alpha-like protein		
	Mouse GFR alpha-like (Gln20-Gly349) Accession # Q6SJE0-1	IEGRMDP	Mouse IgG <sub>2a</sub> (Glu98-Lys330)
	N-terminus		C-terminus

<b>N-terminal Sequence Analysis</b>	No results obtained. Gln20 inferred from enzymatic pyroglutamate treatment revealing Thr21
<b>Structure / Form</b>	Disulfide-linked homodimer
<b>Predicted Molecular Mass</b>	64 kDa

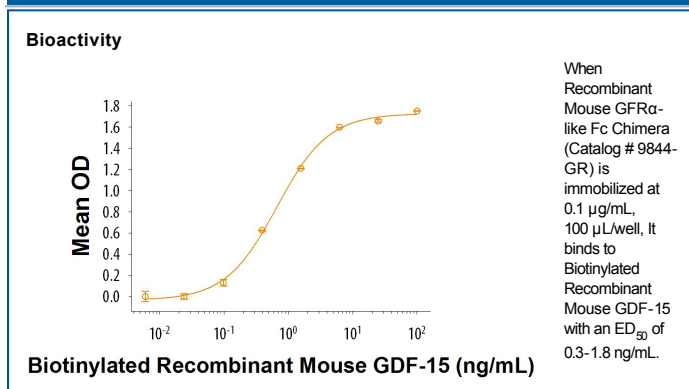
**SPECIFICATIONS**

<b>SDS-PAGE</b>	66-85 kDa, reducing conditions
<b>Activity</b>	Measured by its binding ability in a functional ELISA. When Recombinant Mouse GFR $\alpha$ -like Fc Chimera is coated at 0.1 $\mu$ g/mL, 100 $\mu$ L/well, it binds to Biotinylated Recombinant Mouse GDF-15 with an ED <sub>50</sub> of 0.3-1.8 ng/mL.
<b>Endotoxin Level</b>	<0.10 EU per 1 $\mu$ g of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 500 $\mu$ g/mL in PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<ul style="list-style-type: none"> <li>• 12 months from date of receipt, <math>\leq</math> -20 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 3 months, <math>\leq</math> -20 °C under sterile conditions after reconstitution.</li> </ul>

**DATA**



**BACKGROUND**

GFR alpha-like (GDNF receptor-alpha-like) is a 25 kDa dimer and distant member of the GDNFR family of proteins (1). It is expressed on both fetal and adult hindbrain neurons of the CNS (2), and would appear to function as an anti-apoptotic molecule during neuronal stress. GFR alpha-like is a functional receptor of GDF15 and implicated in diet-based obesity and insulin resistance through c-Ret signaling (2 - 4). Mature mouse GFR alpha-like is a 374 amino acid (aa) type I transmembrane protein. It contains a 330 aa extracellular region that shows a Gas1 domain (aa 220-316), and a 23 aa cytoplasmic tail. Over aa 19-353, mouse GFR alpha-like shares 72% and 71% aa identity with human and rat GFR alpha-like, respectively.

**References:**

1. Li, Z. et al. (2005) J. Neurochem. **95**:361.
2. Yang, L. et al. (2017) Nature Medicine **23**:1158.
3. Mullican, S. et al. (2017) Nature medicine **23**:1150.
4. Emmerson, P. et al. (2017) Nature Medicine **23**:1215.