RD SYSTEMS a biotechne brand

Human GFRα-like Alexa Fluor® 488-conjugated Antibody

Recombinant Monoclonal Rabbit IgG Clone # 2345C Catalog Number: FAB9697G

100 µg

DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human GFRα-like in direct ELISAs.		
Source	Recombinant Monoclonal Rabbit IgG Clone # 2345C		
Purification	Protein A or G purified from cell culture supernatant		
Immunogen	Human embryonic kidney cell line HEK293-derived recombinant human GFRα-like Ser19-Glu351 Accession # Q6UXV0		
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm		
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.		

*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS			
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.			
	Recommended Concentration	Sample	
Flow Cytometry	0.25-1 μg/10 ⁶ cells	HEK293 Human Cell Line Transfected with Human GFRα-like	

PREPARATION AND STORAGE Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. Stability & Storage Protect from light. Do not freeze. • 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

GFR alpha -like (GDNF receptor-alpha-like) is a distant member of the GDNFR family of proteins (1). Mature human GFR alpha-like is a 376 amino acid (aa) type I transmembrane protein. It contains a 333 aa extracellular domain, a 20 aa transmembrane domain and a 23 aa cytoplasmic domain. Over the extracellular domain, human GFRAL shares 72% and 71% identity with mouse and rat GFRAL respectively. It is expressed on both fetal and adult hindbrain neurons of the CNS (3), and would appear to function as an anti-apoptotic molecule during neuronal stress. GFRAL is a functional receptor for GDF-15, facilitating weight-loss functions of the protein through c-Ret downstream signaling (2-4). GFRAL and GDF-15 signaling is implicated in diet-based obesity and insulin resistance (2-4).

References:

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

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