## RD SYSTEMS a biotechne brand

## Human GFRα-like Alexa Fluor® 700-conjugated Antibody

Recombinant Monoclonal Rabbit IgG Clone # 2345C Catalog Number: FAB9697N

100 µg

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 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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 <sup>6</sup> cells	HEK293 Human Cell Line Transfected with Human GFR $\alpha$ -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

### PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.

### Rev. 6/20/2019 Page 1 of 1



**Global** bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956 USA TEL 800 343 7475 **Canada** TEL 855 668 8722 **China** TEL +86 (21) 52380373 **Europe | Middle East | Africa** TEL +44 (0)1235 529449