

Anti- GFRα-1 GDNFRα, RETL1, TmR1

CATALOG No.: PX192A SIZE: 100 μg
PX192B SIZE: 0.5 mg

BACKGROUND:

Glial cell line-derived neurotrophic factor (GDNF) is a potent survival factor for central and peripheral neurons and is essential for the development of kidneys and the enteric nerves system. Physiological responses to GDNF require the presence of a novel glycosylphosphadidylinositol linked protein GDNFR α , which is a cell surface receptor for GDNF (1,2). The cDNAs encoding GDNFR α from human, rat, chicken and mouse have been cloned recently (1-5). GDNFR α was also termed Ret ligand 1 (RETL1) or TGF- β -related neurotrophic factor receptor 1 (TrnR1) and nominated as GFR α -1 recently (5-7). GFR α -1 binds GDNF specifically and mediates activation of the Ret protein tyrosine kinase (PTK). Thus, GDNF, GFR α and the Ret PTK form a complex to transduce GDNF signal and to mediate GDNF function.

SOURCE:

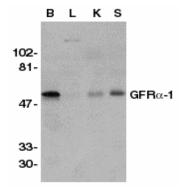
Rabbit anti- GFR α -1 polyclonal antibody was raised against a peptide corresponding to amino acids 369 to 382 of human GFR α -1 (1).

APPLICATION:

This polyclonal antibody can be used for detection of $GFR\alpha$ -1 by Western blot. The amino acid sequence of immunogenic peptide is identical to those of mouse and rat and the antibody recognizes $GFR\alpha$ -1 from human, mouse and rat origins. This antibody is for research use only.

STORAGE:

It is supplied as purified IgG, 100 μg in 200 μl of PBS containing 0.02% sodium azide. Store at -20°C. Stable for one year at 2-8°C.



Western blot analysis of $GFR\alpha-1$ in crude membrane fractions of human brain (B), liver (L), kidney (K), and spleen (S), respectively, with anti- $GFR\alpha-1$ at 1:500 dilution.

REFERENCES:

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- 3. Sanicola M, Hession C, Worley D, Carmillo P, Ehrenfels C, Walus L, Robinson S, Jaworski G, Wei H, Tizard R, Whitty A, Pepinsky RB, Cate RL. Glial cell line-derived neurotrophic factor-dependent RET activation can be mediated by two different cell-surface accessory proteins. *Proc Natl Acad Sci U S.* 1997;94:6238-6243
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- 5. Dey,B.K., Wong,Y.W. and Too,H.P. Cloning of a novel murine isoform of the glial cell line-derived neurotrophic factor receptor. *Neuroreport* 1998;9:37-42

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CAUTION: NOT FOR USE IN HUMANS. FOR RESEARCH PURPOSES ONLY.

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