

# GPR128 (E-13): sc-48206

## BACKGROUND

G protein-coupled receptors (GPCRs), also designated seven transmembrane (7TM) receptors and heptahelical receptors, are a protein family which interact with G proteins (heterotrimeric GTPases) to synthesize intracellular second messengers such as diacylglycerol, cyclic AMP, inositol phosphates and calcium ions. Their diverse biological functions range from vision and olfaction to neuronal and endocrine signaling and are involved in many pathological conditions. G protein receptor 128 (GPR128), a member of the secretin family of GPCRs with a GPS domain in its N-terminal domain, may mediate signaling processes to the interior of the cell via activation of G proteins. GPR128 represents an allopeptide which may be involved in T cell mediated transplant rejection as it is able to stimulate 2.102 T cells.

## REFERENCES

1. Lamah, J., Cone, R.I., Maeda, S., Philip, M., Corbani, M., Nádasdi, L., Ramachandran, J., Smith, G.M. and Sadee, W. 1991. Structure and function of G protein coupled receptors. *Pharm. Res.* 7: 1213-1221.
2. Probst, W.C., Snyder, L.A., Schuster, D.I., Brosius, J. and Sealfon, S.C. 1992. Sequence alignment of the G protein-coupled receptor superfamily. *DNA Cell Biol.* 11: 1-20.
3. Fredriksson, R., Gloriam, D.E., Hoglund, P.J., Lagerstrom, M.C. and Schiöth, H.B. 2003. There exist at least 30 human G protein-coupled receptors with long Ser/Thr-rich N-termini. *Biochem. Biophys. Res. Commun.* 301: 752-734.
4. Bjarnadóttir, T.K., Fredriksson, R., Höglund, P.J., Gloriam, D.E., Lagerström, M.C. and Schiöth, H.B. 2004. The human and mouse repertoire of the adhesion family of receptors. *Genomics* 84: 23-33.
5. Lee, J., Hever, A., Willhite, D., Zlotnik, A. and Hevezi, P. 2005. Effects of RNA degradation on gene expression analysis of human postmortem tissues. *FASEB J.* 19: 1356-1358.
6. Felix, N.J., Suri, A., Walters, J.J., Horvath, S., Gross, M.L. and Allen, P.M. 2006. I-Ep-bound self-peptides: identification, characterization, and role in alloreactivity. *J. Immunol.* 176: 1062-1071.

## CHROMOSOMAL LOCATION

Genetic locus: GPR128 (human) mapping to 3q12.2; Gpr128 (mouse) mapping to 16 C1.1.

## SOURCE

GPR128 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of GPR128 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-48206 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

GPR128 (E-13) is recommended for detection of GPR128 of human and, to a lesser extent, mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GPR128 siRNA (h): sc-60739, GPR128 siRNA (m): sc-60740, GPR128 shRNA Plasmid (h): sc-60739-SH, GPR128 shRNA Plasmid (m): sc-60740-SH, GPR128 shRNA (h) Lentiviral Particles: sc-60739-V and GPR128 shRNA (m) Lentiviral Particles: sc-60740-V.

Molecular Weight (predicted) of GPR128: 89 kDa.

Molecular Weight (observed) of GPR128: 84 kDa.

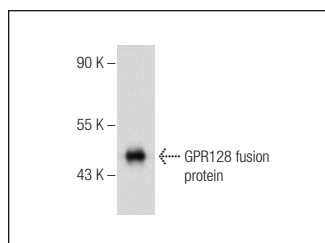
Molecular Weight of glycosylated GPR128: 97 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

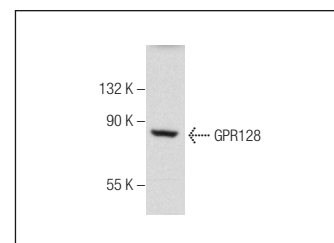
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



GPR128 (E-13): sc-48206. Western blot analysis of human recombinant GPR128 fusion protein.



GPR128 (E-13): sc-48206. Western blot analysis of GPR128 expression in Hep G2 whole cell lysate.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.