

GPRC5B (1H1): sc-293290

BACKGROUND

GPRC5B (G protein-coupled receptor family C group 5 member B, retinoic acid-induced gene 2 protein) is a 403 amino acid protein encoded by the human GPRC5B gene. GPRC5B is an orphan receptor member of the G protein-coupled receptor 3 family. G protein-coupled receptors (GPCRs or GPRs) contain 7 transmembrane domains and transduce extracellular signals through heterotrimeric G proteins. Key roles for G protein-coupled receptors include control of protein maturation and cell surface delivery, and providing the correct framework for interactions with both heterotrimeric G proteins and arrestins to allow signal generation and termination. This retinoic acid-inducible G protein-coupled receptor provides evidence for a possible interaction between retinoid and G protein signaling pathways. GPRC5B is highly expressed in kidney, pancreas and testis, and has moderate expression in brain, heart, prostate, small intestine and spleen.

REFERENCES

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4. Takeda, S., Kadowaki, S., Haga, T., Takaesu, H. and Mitaku, S. 2002. Identification of G protein-coupled receptor genes from the human genome sequence. *FEBS Lett.* 520: 97-101.
5. Inoue, S., Nambu, T. and Shimomura, T. 2004. The RAIG family member, GPRC5D, is associated with hard-keratinized structures. *J. Invest. Dermatol.* 122: 565-573.
6. Imanishi, S., Sugimoto, M., Morita, M., Kume, S. and Manabe, N. 2007. Changes in expression and localization of GPRC5B and RAR α in the placenta and yolk sac during middle to late gestation in mice. *J. Reprod. Dev.* 53: 1131-1136.

CHROMOSOMAL LOCATION

Genetic locus: GPRC5B (human) mapping to 16p12.3.

SOURCE

GPRC5B (1H1) is a mouse monoclonal antibody raised against amino acids 302-403 of GPRC5B of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GPRC5B (1H1) is recommended for detection of GPRC5B of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

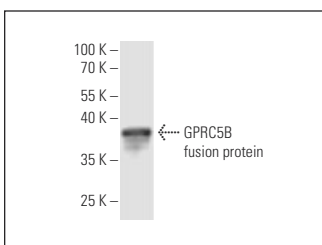
Suitable for use as control antibody for GPRC5B siRNA (h): sc-62409, GPRC5B shRNA Plasmid (h): sc-62409-SH and GPRC5B shRNA (h) Lentiviral Particles: sc-62409-V.

Molecular Weight of GPRC5B: 45 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



GPRC5B (1H1): sc-293290. Western blot analysis of human recombinant GPRC5B fusion protein.

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.