

FRAG1 (H-136): sc-134718

BACKGROUND

The glycosylphosphatidylinositol (GPI)-anchored proteins are subjected to lipid remodeling during their biosynthesis. FRAG1 (FGF receptor-activating protein 1), also known as PGAP2 (post-GPI attachment to proteins 2) or CWH43-N (cell wall biogenesis 43 N-terminal homolog), is a 315 amino acid multi-pass membrane protein and a member of the PGAP2 family. Ubiquitously expressed, with highest levels in testis and pancreas, FRAG1 localizes to both the Endoplasmic reticulum and the Golgi apparatus. FRAG1 interacts with PGAP2IP and is involved in the lipid remodeling steps of GPI-anchor maturation. FRAG1 is required for stable expression of GPI-anchored proteins at the cell surface. Existing as three alternatively spliced isoforms, FRAG1 is conserved in chimpanzee, dog and *Drosophila melanogaster*, and encoded by a gene located on human chromosome 11p15.4. Chromosome 11 is comprised of 135 million base pairs encoding approximately 1,400 genes and makes up around 4% of the human genome.

REFERENCES

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- Sharom, F.J. and Lehto, M.T. 2002. Glycosylphosphatidylinositol-anchored proteins: structure, function, and cleavage by phosphatidylinositol-specific phospholipase C. Biochem. Cell Biol. 80: 535-549.
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- Tashima, Y., Taguchi, R., Murata, C., Ashida, H., Kinoshita, T. and Maeda, Y. 2006. PGAP2 is essential for correct processing and stable expression of GPI-anchored proteins. Mol. Biol. Cell 17: 1410-1420.

CHROMOSOMAL LOCATION

Genetic locus: PGAP2 (human) mapping to 11p15.4; Pgap2 (mouse) mapping to 7 E3.

SOURCE

FRAG1 (H-136) is a rabbit polyclonal antibody raised against amino acids 180-315 mapping at the C-terminus of FRAG1 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.

STORAGE

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

APPLICATIONS

FRAG1 (H-136) is recommended for detection of FRAG1 of mouse, rat and human 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).

FRAG1 (H-136) is also recommended for detection of FRAG1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for FRAG1 siRNA (h): sc-96259, FRAG1 siRNA (m): sc-145236, FRAG1 shRNA Plasmid (h): sc-96259-SH, FRAG1 shRNA Plasmid (m): sc-145236-SH, FRAG1 shRNA (h) Lentiviral Particles: sc-96259-V and FRAG1 shRNA (m) Lentiviral Particles: sc-145236-V.

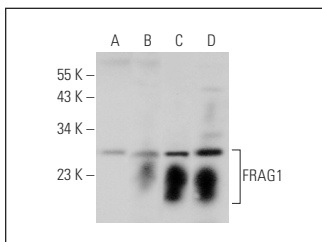
Molecular Weight of FRAG1: 27 kDa.

Positive Controls: mouse colon extract: sc-364238, mouse kidney extract: sc-2255 or mouse placenta extract: sc-364247.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



FRAG1 (H-136): sc-134718. Western blot analysis of FRAG1 expression in mouse placenta (A), mouse pancreas (B), mouse colon (C) and mouse kidney (D) tissue extracts.

RESEARCH USE

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

PROTOCOLS

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