

FRAS1 (H-300): sc-98444

BACKGROUND

Extracellular matrix protein FRAS1 is a 4,007 amino acid protein belonging to the FRAS1 family. Expressed in many adult tissues, FRAS1 has the highest levels of expression in kidney, pancreas, thalamus, fetal kidney and fetal heart. FRAS1 contains five Calx- β domains, which bind calcium with high affinity and undergo a major conformational shift upon binding. Additionally, it contains 12 CSPG (NG2) repeats, 14 FU (furin-like) repeats and 6 WWFC domains. Mutations in the gene encoding FRAS1 cause Fraser syndrome, a multisystem malformation usually comprising cryptophthalmos, cutaneous syndactyly, ear abnormalities, renal agenesis and congenital heart defects. Five named isoforms of FRAS1 exist as a result of alternative splicing events.

REFERENCES

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- Petrou, P., Chiotaki, R., Dalezios, Y. and Chalepakis, G. 2007. Overlapping and divergent localization of FREM1 and FRAS1 and its functional implications during mouse embryonic development. *Exp. Cell Res.* 313: 910-920.
- Chiotaki, R., Petrou, P., Giakoumaki, E., Pavlakis, E., Sitaru, C. and Chalepakis, G. 2007. Spatiotemporal distribution of FRAS1/FREM proteins during mouse embryonic development. *Gene Expr. Patterns* 7: 381-388.
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CHROMOSOMAL LOCATION

Genetic locus: FRAS1 (human) mapping to 4q21.21; Fras1 (mouse) mapping to 5 E3.

SOURCE

FRAS1 (H-300) is a rabbit polyclonal antibody raised against amino acids 6-300 mapping within an N-terminal extracellular domain of FRAS1 of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

FRAS1 (H-300) is recommended for detection of FRAS1 of mouse, rat and 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)], 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).

FRAS1 (H-300) is also recommended for detection of FRAS1 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for FRAS1 siRNA (h): sc-75057, FRAS1 siRNA (m): sc-75058, FRAS1 shRNA Plasmid (h): sc-75057-SH, FRAS1 shRNA Plasmid (m): sc-75058-SH, FRAS1 shRNA (h) Lentiviral Particles: sc-75057-V, FRAS1 shRNA (m) Lentiviral Particles: sc-75058-V.

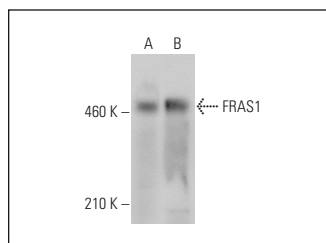
Molecular Weight of FRAS1: 443 kDa.

Positive Controls: LADMAC whole cell lysate: sc-364189 or Neuro-2A whole cell lysate: sc-364185.

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



FRAS1 (H-300): sc-98444. Western blot analysis of FRAS1 expression in LADMAC (A) and Neuro-2A (B) whole cell lysates.

STORAGE

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

PROTOCOLS

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