SANTA CRUZ BIOTECHNOLOGY, INC.

FRAS1 (N-15): sc-79244



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 5 Calx-B 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 VWFC 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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CHROMOSOMAL LOCATION

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

STORAGE

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

SOURCE

FRAS1 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of FRAS1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-79244 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FRAS1 (N-15) 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), 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 (N-15) is also recommended for detection of FRAS1 in additional species, including equine.

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 and FRAS1 shRNA (m) Lentiviral Particles: sc-75058-V.

Molecular Weight of FRAS1: 443 kDa.

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) 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.

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.