

FAM3A (G-12): sc-131512

BACKGROUND

The FAM3 family of proteins consist of FAM3A, FAM3B, FAM3C and FAM3D. FAM3 proteins form four-helix-bundle structures and are thought to function in a similar manner as cytokines. FAM3A (family with sequence similarity 3, member A), also known as 2-19 protein, is a 230 amino acid secreted protein that contains one GG domain, which may function as an important structural element. GG domain-containing proteins have been implicated in muscle-eye-brain disease and non-syndromic hearing loss. FAM3A is predominantly expressed in vascular endothelium, particularly capillaries, though it is also expressed in islets of Langerhans of the endocrine pancreas. The gene encoding FAM3A is localized to the human X chromosome, which consists of about 153 million base pairs and nearly 1,000 genes. Color blindness, hemophilia, and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently as males carry a single X chromosome.

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CHROMOSOMAL LOCATION

Genetic locus: FAM3A (human) mapping to Xq28; Fam3a (mouse) mapping to X A7.3.

SOURCE

FAM3A (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FAM3A 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-131512 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAM3A (G-12) is recommended for detection of FAM3A 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); non cross-reactive with FAM3B or FAM3D.

FAM3A (G-12) is also recommended for detection of FAM3A in additional species, including canine.

Suitable for use as control antibody for FAM3A siRNA (h): sc-91207, FAM3A siRNA (m): sc-145038, FAM3A shRNA Plasmid (h): sc-91207-SH, FAM3A shRNA Plasmid (m): sc-145038-SH, FAM3A shRNA (h) Lentiviral Particles: sc-91207-V and FAM3A shRNA (m) Lentiviral Particles: sc-145038-V.

Molecular Weight of FAM3A: 25 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.

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 or our catalog for detailed protocols and support products.