

FGD6 (H-175): sc-134720

BACKGROUND

Members of the FGD family, including FGD1, FGD2, FGD3, FGD4, FGD5 and FGD6, encode guanine nucleotide exchange factors that specifically activate the Rho GTPase Cdc42. All FGD proteins contain equivalent signaling domains and a conserved structural organization, which strongly suggests that these signaling domains form a canonical core structure for members of the FGD family of RhoGEF proteins. These proteins also control essential signals required during embryonic development. FGD6 (FYVE, RhoGEF and PH domain containing 6), also known as ZFYVE24 (zinc finger FYVE domain-containing protein 24), is a 1,430 amino acid cytoplasmic protein that belongs to the FGD family and exists as 2 alternatively spliced isoforms. Thought to activate Cdc42 by exchanging bound GDP for free GTP, FGD6 is also implicated in maintenance of the actin cytoskeleton and regulating cell shape. Encoded by a gene that maps to human chromosome 12q22, FGD6 contains one FYVE-type zinc finger, two PH domains and a single DH (DBL-homology) domain.

REFERENCES

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CHROMOSOMAL LOCATIONS

Genetic locus: FGD6 (human) mapping to 12q22; (mouse) mapping to 10 C3.

SOURCE

FGD6 (H-175) is a rabbit polyclonal antibody raised against amino acids 998-1172 mapping within an internal region of FGD6 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.

APPLICATIONS

FGD6 (H-175) is recommended for detection of FGD6 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).

FGD6 (H-175) is also recommended for detection of FGD6 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for FGD6 siRNA (h): sc-95963, FGD6 siRNA (m): sc-145165, FGD6 shRNA Plasmid (h): sc-95963-SH, FGD6 shRNA Plasmid (m): sc-145165-SH, FGD6 shRNA (h) Lentiviral Particles: sc-95963-V and FGD6 shRNA (m) Lentiviral Particles: sc-145165-V.

Molecular Weight of FGD6: 161 kDa.

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.

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.