

FGD3 Rabbit pAb

FGD3 Rabbit pAb
Catalog # AP56109

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q5JSP0
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79401
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FGD3
Epitope Specificity	501-600/725
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Cytoplasm > cytoskeleton.
SIMILARITY	Contains 1 DH (DBL-homology) domain. Contains 1 FYVE-type zinc finger. Contains 2 PH domains.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	FGD1 gene mutations result in faciogenital dysplasia (FGDY, Aarskog-Scott syndrome), an X-linked developmental disorder that adversely affects the formation of multiple skeletal structures. FGD1 maps to human chromosome Xp11.21 and shares a high degree of sequence identity with the FGD2 (6p21.2) and the FGD3 (9q22.31) proteins. FGD1 encodes a guanine nucleotide exchange factor that specifically activates the Rho GTPase Cdc42. FGD2 is present in several diverse tissues during embryogenesis, suggesting a role in embryonic development. FGD3 stimulates fibroblasts to form filopodia, which are Actin microspikes formed upon the stimulation of Cdc42. All FGD family members 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 control essential signals required during embryonic development.

Additional Information

Gene ID	89846
Other Names	FYVE, RhoGEF and PH domain-containing protein 3, Zinc finger FYVE domain-containing protein 5, FGD3, ZFYVE5
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name FGD3

Synonyms ZFYVE5

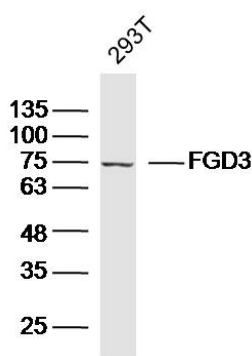
Function Promotes the formation of filopodia. May activate CDC42, a member of the Ras-like family of Rho- and Rac proteins, by exchanging bound GDP for free GTP. Plays a role in regulating the actin cytoskeleton and cell shape (By similarity).

Cellular Location Cytoplasm. Cytoplasm, cytoskeleton

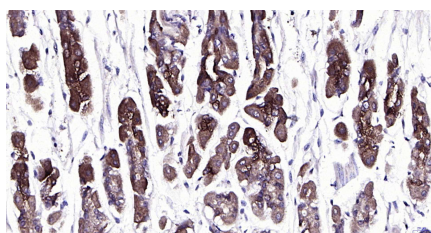
Background

FGD1 gene mutations result in faciogenital dysplasia (FGDY, Aarskog-Scott syndrome), an X-linked developmental disorder that adversely affects the formation of multiple skeletal structures. FGD1 maps to human chromosome Xp11.21 and shares a high degree of sequence identity with the FGD2 (6p21.2) and the FGD3 (9q22.31) proteins. FGD1 encodes a guanine nucleotide exchange factor that specifically activates the Rho GTPase Cdc42. FGD2 is present in several diverse tissues during embryogenesis, suggesting a role in embryonic development. FGD3 stimulates fibroblasts to form filopodia, which are Actin microspikes formed upon the stimulation of Cdc42. All FGD family members 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 control essential signals required during embryonic development.

Images



Sample: 293T Cell (Human) Lysate at 40 ug
Primary: Anti-FGD3 (AP56109) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 79 kD
Observed band size: 75 kD



Paraformaldehyde-fixed, paraffin embedded Mouse Stomach; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with FGD3 Polyclonal Antibody, Unconjugated (AP56109) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.