

# FGD3 Rabbit pAb

FGD3 Rabbit pAb Catalog # AP56109

#### **Product Information**

**Application** WB, IHC-P, IHC-F, IF

Primary Accession

Reactivity

Host

Clonality

Calculated MW

Physical State

Q5|SP0

Human

Rabbit

Polyclonal

79401

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

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

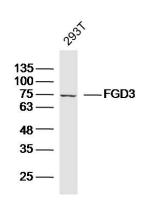
similarity).

**Cellular Location** Cytoplasm. Cytoplasm, cytoskeleton

# **Background**

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## **Images**

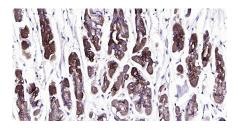


Sample: 293T Cell (Human) Lysate at 40 ug Primary: Anti-FGD3 (AP56109) at 1/300 dilution

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.