

SMG5 Rabbit pAb

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Product Information

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

Primary Accession Q9UPR3

Reactivity Human, Mouse

Predicted Rat, Dog, Pig, Horse, Rabbit, Sheep

Host Rabbit Clonality Polyclonal **Calculated MW** 113928 **Physical State** Liquid

KLH conjugated synthetic peptide derived from human SMG5 **Immunogen**

Epitope Specificity 461-560/1016

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 Cytoplasmic and Nuclear. Contains 1 PINc domain.

SIMILARITY

Interacts with TERT, PPP2CA and SMG1. Part of a complex that contains **SUBUNIT** SMG1, SMG5, SMG7, PPP2CA, a short isoform of UPF3A (isoform UPF3AS, but

not isoform UPF3AL) and phosphorylated UPF1. Not detected in complexes

that contain unphosphorylated UPF1.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions SMG5 is involved in nonsense-mediated mRNA decay (Ohnishi et al., 2003

[PubMed 14636577]).[supplied by OMIM, Mar 2008]

Additional Information

Gene ID 23381

Nonsense-mediated mRNA decay factor SMG5 **Other Names**

> {ECO:0000312|HGNC:HGNC:24644}, EST1-like protein B, LPTS-RP1 {ECO:0000303 | Ref.3}, LPTS-interacting protein, SMG-5 homolog, hSMG-5,

SMG5 (HGNC:24644)

Target/Specificity Ubiquitous.

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When **Storage**

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 SMG5 (HGNC:24644)

Function Plays a role in nonsense-mediated mRNA decay. Does not have RNase

activity by itself. Promotes dephosphorylation of UPF1. Together with SMG7 is thought to provide a link to the mRNA degradation machinery involving exonucleolytic pathways, and to serve as an adapter for UPF1 to protein phosphatase 2A (PP2A), thereby triggering UPF1 dephosphorylation.

Necessary for TERT activity.

Cellular Location Cytoplasm. Nucleus. Note=Predominantly cytoplasmic, and nuclear. Shuttles

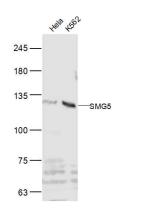
between nucleus and cytoplasm. Detected in cytoplasmic mRNA decay bodies

Tissue Location Ubiquitous.

Background

SMG5 is involved in nonsense-mediated mRNA decay (Ohnishi et al., 2003 [PubMed 14636577]).[supplied by OMIM, Mar 2008]

Images



Sample:

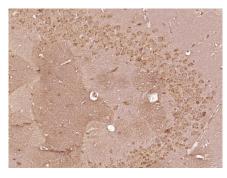
Hela(Human) Cell Lysate at 30 ug K562(Human) Cell Lysate at 30 ug

Primary: Anti-SMG5 (AP54916) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000

dilution

Predicted band size: 114 kD Observed band size: 120 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SMG5) Polyclonal Antibody, Unconjugated (AP54916) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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