

SMG5 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54916**Specification**

SMG5 Polyclonal Antibody - Product Information

Application	WB, IHC-P, IHC-F, IF, ICC
Primary Accession	Q9UPR3
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	114 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SMG5
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.
SIMILARITY	Contains 1 PINc domain.
SUBUNIT	Interacts with TERT, PPP2CA and SMG1. Part of a complex that contains 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]

SMG5 Polyclonal Antibody - Additional Information

Gene ID 23381

Other Names

Protein SMG5, EST1-like protein B, LPTS-RP1, LPTS-interacting protein, SMG-5 homolog, hSMG-5, SMG5, EST1B, KIAA1089

Target/Specificity

Ubiquitous.

Dilution

WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

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.

SMG5 Polyclonal Antibody - 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

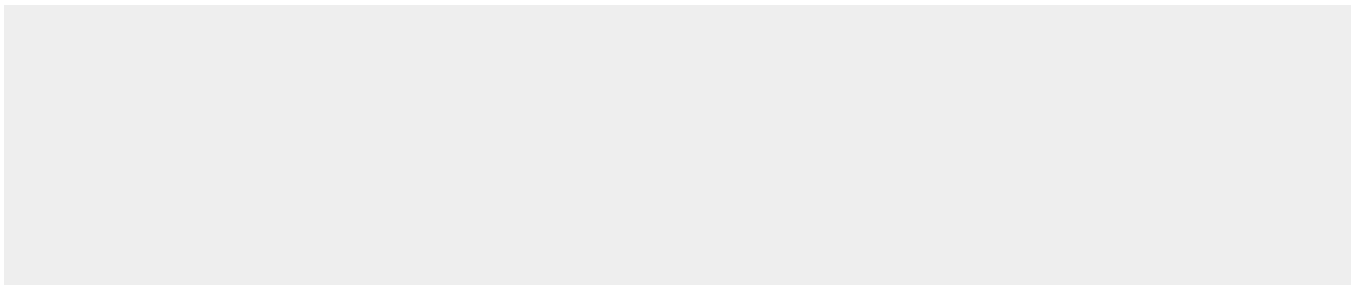
Tissue Location

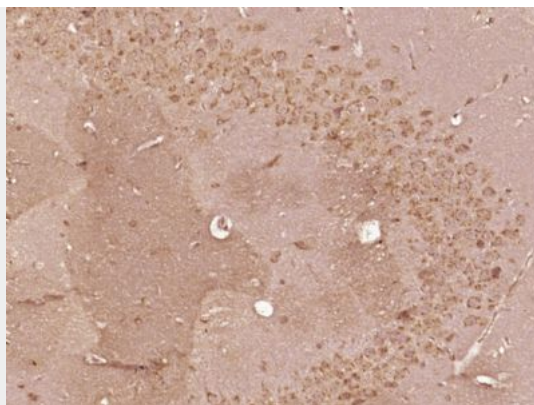
Ubiquitous.

SMG5 Polyclonal Antibody - Protocols

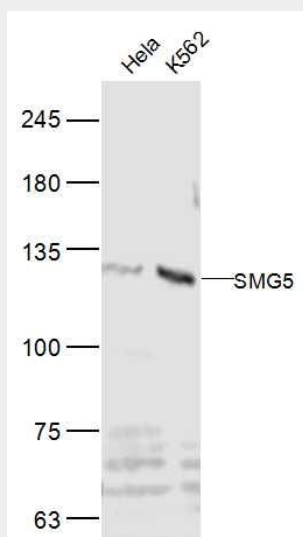
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SMG5 Polyclonal Antibody - Images



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 (bs-12638R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Sample:

HeLa(Human) Cell Lysate at 30 ug

K562(Human) Cell Lysate at 30 ug

Primary: Anti-SMG5 (bs-12638R) at 1/300 dilution

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

Predicted band size: 114 kD

Observed band size: 120 kD