

Rabbit EST1A Polyclonal Antibody | anti-SMG6 antibody

EST1A Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328973	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%), Xenopus(100%)	ELISA

PRODUCT SYNONYMS

EST1A; Polyclonal Antibody; EST1A Antibody; C17orf31; EST1-like protein A; Ever shorter telomeres 1A; hSmg5/7a; KIAA0732; Smg-6 homolog; SMG6; Telomerase subunit EST1A; Telomerase-binding protein EST1A; anti-SMG6 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%), Xenopus(100%)
Clonality	Polyclonal
Isotype	IgG
Specificity	EST1A Antibody detects endogenous levels of total EST1A.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
Concentration	1mg/ml (varies by lot)
Sequence Length	511
Applicable Applications for anti-SMG6 antibody	ELISA
Immunogen	A synthesized peptide derived from human EST1A, corresponding to a region within N-terminal amino acids.
Fragment	Fab fragment
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA328973 staining HeLa cells by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. Samples were then incubated with primary Ab(AAA328973) and mouse anti-beta tubulin Ab(T0023) for 1 hour at 37°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI (blue).



WB (Western Blot)

Western blot analysis of extracts from Jurkat, using EST1A Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-SMG6 antibody	Function: Component of the telomerase ribonucleoprotein (RNP) complex that is essential for the replication of chromosome termini (PubMed:19179534). May have a general role in telomere regulation (PubMed:12676087, PubMed:12699629). Promotes in vitro the ability of TERT to elongate telomeres (PubMed:12676087, PubMed:12699629). Overexpression induces telomere uncapping, chromosomal end-to-end fusions (telomeric DNA persists at the fusion points) and did not perturb TRF2 telomeric localization (PubMed:12676087, PubMed:12699629). Binds to the single-stranded 5'-(GTGTGG)(4)GTGT-3' telomeric DNA, but not to a telomerase RNA template component (TER) (PubMed:12676087, PubMed:12699629).Plays a role in nonsense-mediated mRNA decay (PubMed:18974281, PubMed:19060897, PubMed:20930030, PubMed:17053788). Is thought to provide a link to the mRNA degradation machinery as it has endonuclease activity required to initiate NMD, and to serve as an adapter for UPF1 to protein phosphatase 2A (PP2A), thereby triggering UPF1 dephosphorylation (PubMed:18974281, PubMed:19060897, PubMed:20930030, PubMed:17053788). Degrades single-stranded RNA (ssRNA), but not ssDNA or dsRNA (PubMed:18974281, PubMed:19060897, PubMed:20930030, PubMed:17053788). Subcellular Location: Nucleus>Nucleolus. Chromosome>Telomere. Cytoplasm>Cytosol. Note: Particularly enriched in the nucleolus. Tissue Specificity: Ubiquitous. Subunit Structure: May form homooligomers (PubMed:20930030). Associated component of the telomerase holoenzyme complex (PubMed:19179534). Interacts with TERT, independently of the telomerase RNA (PubMed:12676087, PubMed:12699629). Interacts with SMG1, SMG5, SMG7, UPF1, UPF2, UPF3B and the PP2A catalytic subunits (PubMed:12554878, PubMed:19060897, PubMed:20930030). Also interacts with the exon junction complex (EJC) composed at least of CASC3, EIF4A3, MAGOH and RBM8A; required for the process of nonsense-mediated mRNA decay (PubMed:20930030). Similarity: The PINc domain confers endonuclease activity and is expected to bind the catalytic metal ion.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	378744173
NCBI GeneID	23293
NCBI Accession #	NP_001243756.1
NCBI GenBank Nucleotide #	NP_001243756.1
UniProt Accession #	Q86US8
Molecular Weight	Observed Molecular Weight: (Observed)160kD. Predicted Molecular Weight: (Calculated)160kDa.
NCBI Official Full Name	telomerase-binding protein EST1A isoform 3
NCBI Official Synonym Full Names	SMG6 nonsense mediated mRNA decay factor
NCBI Official Symbol	SMG6
NCBI Official Synonym Symbols	EST1A; SMG-6; C17orf31; hSMG5/7a
NCBI Protein Information	telomerase-binding protein EST1A
UniProt Protein Name	Telomerase-binding protein EST1A
UniProt Gene Name	SMG6
UniProt Synonym Gene Names	C17orf31; EST1A; KIAA0732
UniProt Entry Name	EST1A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

