



PUM1 Rabbit pAb

Catalog No	YP-Ab-19480
Isotype	IgG
Reactivity	Human,Mouse
Applications	WB
Gene Name	PUM1 KIAA0099 PUMH1
Immunogen	Synthesized peptide derived from human PUM1. AA range:439-539
Specificity	This antibody detects endogenous levels of PUM1 at Human, Mouse
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-15°C to -25°C/1 year(Do not lower than -25°C)
Synonyms	PUM1 KIAA0099 PUMH1;Pumilio homolog 1 (HsPUM) (Pumilio-1)
Observed Band	
Calculated Molecular Weight	130kD
Cell Pathway	Cytoplasm . Cytoplasm , P-body . Cytoplasmic granule . Recruited to cytoplasmic stress granules upon viral infection. .
Tissue Specificity	Expressed in brain , heart , kidney , muscle , intestine and stomach. Not expressed in cerebellum , corpus callosum , caudate nucleus , hippocampus , medulla oblongata and putamen. Expressed in all fetal tissues tested.
Function	Sequence-specific RNA-binding protein that acts as a post-transcriptional repressor by binding the 3'-UTR of mRNA targets. Binds to an RNA consensus sequence , the Pumilio Response Element (PRE) , 5'-UGUANAUA-3' , that is related to the Nanos Response Element (NRE) . Mediates post-transcriptional repression of transcripts via different mechanisms: acts via direct recruitment of the CCR4-POP2-NOT deadenylase leading to translational inhibition and mRNA degradation . Also mediates deadenylation-independent repression by promoting accessibility of miRNAs . Following growth factor stimulation , phosphorylated and binds to the 3'-UTR of CDKN1B/p27 mRNA , inducing a local conformational change that exposes miRNA-binding sites , promoting association of miR-221 and miR-222 , efficient suppression of CDKN1B/p27 expression , and rapid entry to the cell cycle . Acts as a post-transcriptional repressor of E2F3 mRNAs by binding to its 3'-UTR and facilitating miRNA regulation . Represses a program of genes necessary to maintain genomic stability such as key mitotic , DNA repair and DNA



replication factors. Its ability to repress those target mRNAs is regulated by the lncRNA NORAD (non-coding RNA activated by DNA damage) which, due to its high abundance and multitude of PUMILIO binding sites, is able to sequester a significant fraction of PUM1 and PUM2 in the cytoplasm. Involved in neuronal functions by regulating ATXN1 mRNA levels: acts by binding to the 3'-UTR of ATXN1 transcripts, leading to their down-regulation independently of the miRNA machinery. Plays a role in cytoplasmic sensing of viral infection. In testis, acts as a post-transcriptional regulator of spermatogenesis by binding to the 3'-UTR of mRNAs coding for regulators of p53/TP53. Involved in embryonic stem cell renewal by facilitating the exit from the ground state: acts by targeting mRNAs coding for naive pluripotency transcription factors and accelerates their down-regulation at the onset of differentiation (By similarity). Binds specifically to miRNA MIR199A precursor, with PUM2, regulates miRNA MIR199A expression at a posttranscriptional level.

Background

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images