



PUM1 Mouse mAb

Catalog No	YP-mAb-19480
Isotype	IgG
Reactivity	Human,Mouse,Rat
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,Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal,Mouse,IgG
Purification	The antibody was affinity-purified from mouse 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 postranscriptional 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