



Rabbit Anti-Pumilio 2 antibody

SL12246R

Product Name:	Pumilio 2
Chinese Name:	PUM2蛋白抗体
Alias:	FLJ36528; KIAA0235; MGC138251; MGC138253; PUM 2; Pum2; PUM2; PUMH2; Pumilio (Drosophila) homolog 2; Pumilio homolog 2 (Drosophila); Pumilio homolog 2; Pumilio2; PUM2_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	114kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from Human Pumilio 2:901-1066/1066
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	Pumilio 2 is a sequence-specific RNA-binding protein that regulates translation and mRNA stability by binding mRNA targets. It supports proliferation and self-renewal of stem cells by regulating the translation of key transcripts. The Pumilio gene encodes proteins that are required for development of germ stem cells in one or both sexes. The Pumilio protein interacts with the human Nanos1 protein and this interaction may play a

conserved role in germ cell development. Pumilio 2 is highly expressed in testis and ovary and at lower levels in brain, heart, kidney, liver, muscle, placenta, intestine and stomach. It is also expressed in stem cells, germ cells and in most fetal tissues.

Function:

Pumilio 2, a human homolog of Pumilio, a protein required to maintain germ line stem cells in *Drosophila* and *Caenorhabditis elegans*, forms a stable complex with DAZ through the same functional domain required for RNA binding, protein-protein interactions and rescue of Pumilio mutations in flies. Pumilio 2 is expressed predominantly in human embryonic stem cells and germ cells and colocalizes with DAZ and DAZL in germ cells. Pumilio 2 is a component of conserved cellular machinery that may be required for germ cell development.

Subunit:

Homodimer; homodimerizes in vitro. Interacts with DAZ, DAZL and NANOS1 via its pumilio repeats. Binds to a RNA consensus sequence, that is related to the Nanos Response Element (NRE), a 16 bp sequence found in the 3'-UTR of the *Drosophila* hb mRNA. Also binds to the NRE. Interacts with NANOS3 (By similarity). Interacts with SNAPIN.

Subcellular Location:

Cytoplasm (Probable). Cytoplasmic granule (By similarity). Cytoplasm, perinuclear region. Note=The cytoplasmic granules are stress granules which are a dense aggregation in the cytosol composed of proteins and RNAs that appear when the cell is under stress. Co-localizes with NANOS3 in the stress granules (By similarity). Co-localizes with NANOS1 and SNAPIN in the perinuclear region of germ cells.

Tissue Specificity:

Expressed in male germ cells of adult testis (at protein level). Highly expressed in testis and ovary. Predominantly expressed in stem cells and germ cells. Expressed at lower level in brain, heart, kidney, liver, muscle, placenta, intestine and stomach Expressed in cerebellum, corpus callosum, caudate nucleus, hippocampus, medulla oblongata and putamen. Expressed in all fetal tissues tested.

Similarity:

Contains 1 PUM-HD domain.
Contains 8 pumilio repeats.

SWISS:

Q8TB72

Gene ID:

23369

Database links:

[Entrez Gene: 282441](#)Cow

[Entrez Gene: 23369](#)Human

[Entrez Gene: 80913](#)Mouse

[Omin: 607205](#)Human

[SwissProt: Q8TB72](#)Human

[SwissProt: Q80U58](#)Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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