

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PUM2 in direct ELISAs and Western blots. In direct ELISAs, less than 4% cross-reactivity with recombinant human PUM1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PUM2 Pro103-Gly250 Accession # Q8TB72
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

PUM2 (Pumilio homolog 2/Pumilio-2) is a 121-125 kDa member of the PUF family of RNA-binding proteins. It is expressed in a variety of cell types, including neurons, skeletal muscle cells, stem cells and germ cells, and plays a role in asymmetric cell division. PUM2 appears to bind to the 3' untranslated region of target mRNAs. By doing so, it causes a conformational change in the RNA, allowing for the subsequent binding of miRNAs and the silencing of protein translation. In germ cells, PUM2 is also reported to complex with NANOS1 and SNAPIN, although its function in this complex is unclear. Human PUM2 is 1066 amino acids (aa) in length. It contains a SNAPIN interaction site (aa 1-260), one PUM-HD region (aa 706-1048) and eight consecutive pumilio repeats (aa 726-1022). There are six utilized Ser/Thr phosphorylation sites, and at least two isoform variants. One is 95-96 kDa in size and shows a deletion of aa 574-652, while another shows a deletion of two amino acids; Val829Ile830. Over aa 103-250, human PUM2 shares 95% aa sequence identity with mouse PUM2.

PRODUCT SPECIFIC NOTICES

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