

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse PUM1 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human PUM2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PUM1 Pro230-Ala372 Accession # Q14671
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.
Immunocytochemistry	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

PUM1 (Pumilio homolog 1/Pumilio-1) is a 130-140 kDa member of the PUF (Pumilio and FBF) family of RNA-binding proteins. It is ubiquitously expressed, and appears to be involved in cell cycle regulation. Among other things, PUM1 is known to bind to the 3' UTR of p27 mRNA following cell activation. This results in a conformational change in the p27 transcript, allowing for miRNA binding and translational repression, followed by a decline in p27 availability and entry into S-phase of the cell cycle. Human PUM1 is 1186 amino acids (aa) in length. It contains N-terminal Ala-, Gln- and Ser-rich regions (aa 393-815), one PUM-HD region (aa 828-1168) and eight consecutive pumilio repeats (aa 726-1142). There are six utilized Ser/Thr phosphorylation sites, and at least three isoform variants. One contains a five aa insert after Gly418, a second possesses an alternative start site 36 aa upstream of the standard site, and a third shows a deletion of aa 597-623 coupled to a two aa insertion after Gln950. Over aa 230-372, human PUM1 is identical to mouse PUM1 in amino acid sequence. Overall, human and mouse PUM1 share 99% aa sequence identity.

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