

DESCRIPTION

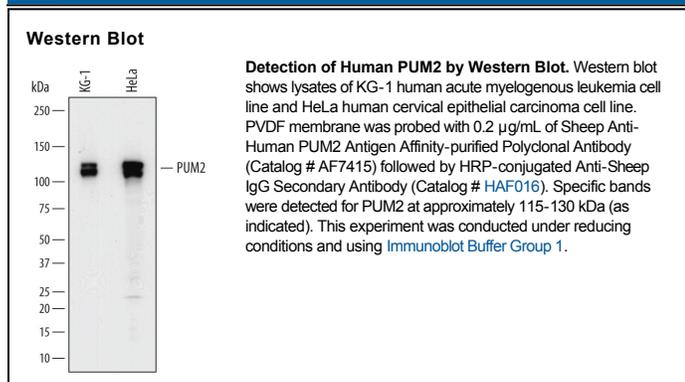
Species Reactivity	Human
Specificity	Detects human PUM2 in direct ELISAs and Western blots. In direct ELISAs, less than 4% cross-reactivity with recombinant human PUM1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PUM2 Pro103-Gly250 Accession # Q8TB72
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	0.2 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.