

DESCRIPTION

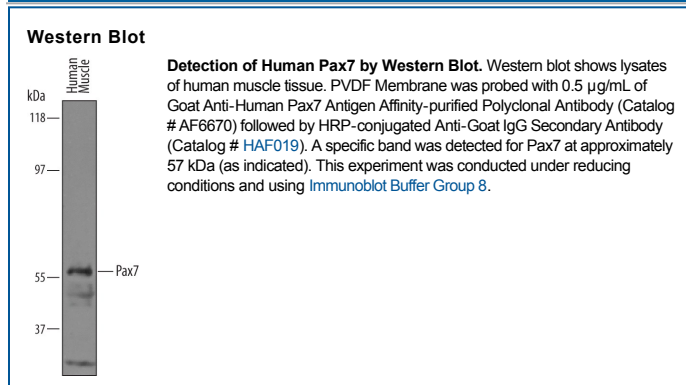
Species Reactivity	Human
Specificity	Detects human Pax7 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant human (rh) Pax3 is observed and approximately 4% cross-reactivity with rhPax1 and rhPax6 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Pax7 Met1-Gly196 Accession # P23759
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	0.5 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

PAX7 (Paired box 7A; also HuP1) is a 57 kDa member of the paired homeobox family of transcription factors. It is expressed in select neurons (in rodent) and skeletal muscle satellite cells, where, in the latter, it promotes both a muscle stem cell state (PAX7+ desmin- cells) and a lineage commitment state (PAX7+ desmin+ cells). PAX7 forms heterodimers with PAX3, and interacts with the regulatory regions of the Myf5 locus. Human PAX7(A) is 520 amino acids (aa) in length. It contains an N-terminal paired box DNA-binding domain (aa 34-163), a homeodomain (aa 218-275) and a C-terminal poly-alanine region (aa 340-346). Multiple splice forms of PAX7 exist. There is a 54 kDa isoform B that contains a 38 aa substitution for aa 468-520, plus a second isoform that shows a deletion of Gly151 and Leu152. There is also a chromosomal rearrangement that fuses aa 30-385 of PAX7 to aa 211-265 of FOXO1A/FKHR. Over aa 1-196, human PAX7 shares 86% and 96% aa identity with human PAX3 and mouse PAX7, respectively.