

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
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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

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.

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