

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 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.