Pax-7 (PAX7): sc-81648

**BACKGROUND**

The Pax gene family of nuclear transcription factors is comprised of nine members that function during embryogenesis to regulate the temporal and position-dependent differentiation of cells. In addition, the family is involved in a variety of signal transduction pathways in the adult organism. Mutations in the Pax family of proteins have been linked to disease and cancer in humans. Pax-7 is a protein specifically expressed in cultured satellite cell-derived myoblasts. *In situ* hybridization reveals that Pax-7 is also expressed in satellite cells residing in adult muscle. A chromosomal aberration in the gene encoding Pax-7 causes rhabdomyosarcoma 2 (RMS2) (also called alveolar rhabdomyosarcoma).

**CHROMOSOMAL LOCATION**

Genetic locus: PAX7 (human) mapping to 1p36.13; Pax7 (mouse) mapping to 4 D3.

**SOURCE**

Pax-7 (PAX7) is a mouse monoclonal antibody raised against amino acids 352-523 of Pax-7 of avian origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Pax-7 (PAX7) is available conjugated to either fluorescein (sc-81648 FITC), Alexa Fluor® 488 (sc-81648 AF488), Alexa Fluor® 546 (sc-81648 AF546) or Alexa Fluor® 594 (sc-81648 AF594), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 647 (sc-81648 AF647) or Alexa Fluor® 700 (sc-81648 AF700), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, Pax-7 (PAX7) is available conjugated to biotin (sc-81648 B), 200 µg/ml, for WB, IHC(P) and ELISA.

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**APPLICATIONS**

Pax-7 (PAX7) is recommended for detection of Pax-7 of mouse, rat, human and avian origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Pax-7 siRNA (h): sc-38749, Pax-7 siRNA (m): sc-38750, Pax-7 shRNA Plasmid (h): sc-38749-SH, Pax-7 shRNA Plasmid (m): sc-38750-SH, Pax-7 shRNA (h) Lentiviral Particles: sc-38749-V and Pax-7 shRNA (m) Lentiviral Particles: sc-38750-V.

Molecular Weight of Pax-7: 57 kDa.

Positive Controls: RD whole cell lysate: sc-364791 or HT-1080 whole cell lysate: sc-364183.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**DATA**

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.