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).

REFERENCES


CHROMOSOMAL LOCATION

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

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 IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

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

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.

RESEARCH USE

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

STORAGE

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

DATA

![Western blot analysis of Pax-7 expression in HT-1080 whole cell lysate.](image1)

![Western blot analysis of Pax-7 expression in RD whole cell lysate.](image2)

SELECT PRODUCT CITATIONS


See Pax (D-7): sc-514352 for Pax antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.