

**Mouse Anti-PAX7 [SPM613]: MC0984, MC0984RTU7**

**Intended Use:** For Research Use Only

**Description:** 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).

**Specifications:**

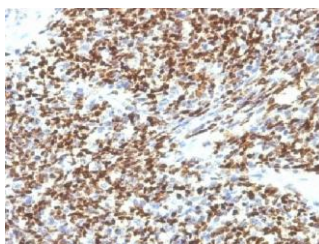
Clone: SPM613  
 Source: Mouse  
 Isotype: IgG1k  
 Reactivity: Human  
 Localization: Nucleus  
 Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC  
 Package:

Description	Catalog No.	Size
PAX7 Concentrated	MC0984	1 ml
PAX7 Prediluted	MC0984RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Pancreas, cerebellum, stomach  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human rhabdomyosarcoma tissue stained with anti-PAX7 using DAB.

**References:**

1. Rhabdomyosarcoma: current challenges and their implications for developing therapies. Hettmer S, et al. Cold Spring Harb Perspect Med. Nov 3;4(11):a025650, 2014.
2. Detection of PAX3/PAX7-FKHR fusion transcripts in rhabdomyosarcoma and other small round cell tumors by 1-step reverse transcriptase polymerase chain reaction: a novel tool for diagnosis and differentiation. Yang XL, et al. Ann Diagn Pathol. 2012 Apr;16(2):107-11, 2012.
3. C2C12 myoblastoma cell differentiation and proliferation is stimulated by androgens and associated with a modulation of myostatin and Pax7 expression. Diel P, et al. J Mol Endocrinol. May;40(5):231-41, 2008.