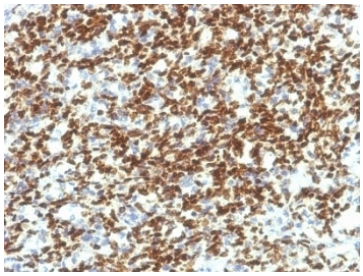
PAX7 Antibody [clone PAX7/1187] (V2773)

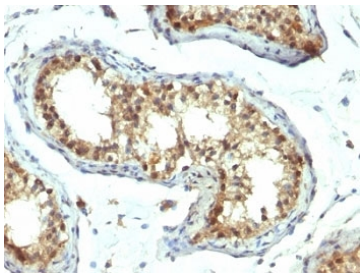
Catalog No.	Formulation	Size
V2773-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2773-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2773SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2773IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

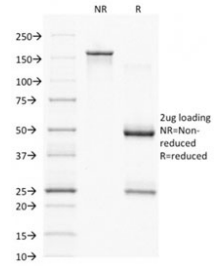
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	PAX7/1187
Purity	Protein G affinity chromatography
UniProt	P23759
Localization	Nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Prediluted IHC Only Format : incubate for 30 min at RT (1)
Limitations	This PAX7 antibody is available for research use only.



IHC testing of formalin-fixed, paraffin-embedded human Rhabdomyosarcoma with PAX7 antibody (clone PAX7/1187). Required HIER: boil tissue sections in 10mM Tris buffer with 1mM EDTA, pH 9, for 10-20 min.



IHC: Formalin-fixed, paraffin-embedded human testicular carcinoma stained with PAX7 antibody (clone PAX7/1187). Required HIER: boil tissue sections in 10mM Tris buffer with 1mM EDTA, pH 9, for 10-20 min.



SDS-PAGE analysis of purified, BSA-free PAX7 antibody (clone PAX7/1187) as confirmation of integrity and purity.

Description

PAX7 antibody clone PAX7/1187 is a monoclonal antibody specific for paired box protein 7, a transcription factor that plays a central role in myogenesis and neural crest development. PAX7 regulates the proliferation and maintenance of satellite cells, the stem cells of skeletal muscle, and contributes to craniofacial patterning and neural crest lineage specification. Because of its role in both normal development and disease, PAX7 is studied in developmental biology, regenerative medicine, and oncology. NSJ Bioreagents provides this antibody for high-quality detection of PAX7 in tissues and cultured cells.

The antibody produces strong nuclear staining in satellite cells located beneath the basal lamina of skeletal muscle fibers. In developmental biology, PAX7 detection is essential for studying the specification and expansion of myogenic progenitors. It has been widely used to trace the contribution of satellite cells during muscle growth, regeneration, and repair.

In regenerative medicine, PAX7 is considered a critical marker for muscle stem cell populations. The antibody enables identification of progenitors used in studies of muscular dystrophy, injury repair, and therapeutic cell transplantation. Reliable detection of PAX7 expression supports investigations into how satellite cells maintain long-term regenerative capacity.

In oncology, PAX7 has diagnostic value in rhabdomyosarcoma, a pediatric soft tissue sarcoma. Detection of PAX7 expression helps pathologists distinguish rhabdomyosarcoma from other pediatric tumors, and PAX7 gene fusions are used as biomarkers in molecular diagnostics. The antibody provides reproducible nuclear staining that supports tumor classification and research into oncogenic transcription factors.

PAX7 also plays a role in neural crest development, influencing craniofacial morphogenesis and stem cell populations in the peripheral nervous system. The antibody has been applied in developmental models to explore how transcriptional regulators guide neural crest-derived lineages.

Validated in tissue-based and cell-based systems, this antibody consistently provides strong nuclear staining with minimal background. Alternate names include paired box protein 7 antibody, satellite cell transcription factor antibody, and rhabdomyosarcoma marker antibody.

Application Notes

Optimal dilution of the PAX7 antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant human PAX7 protein corresponding to amino acids 301-505 was used as the immunogen for this antibody.

Storage

Store the PAX7 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).