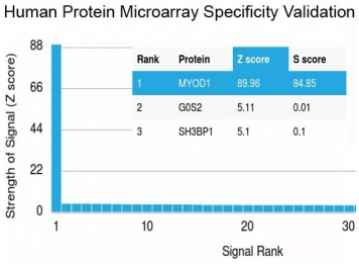
Recombinant MyoD Antibody / Rabbit Monoclonal [clone MYOD1/2075R] (V3663)

Catalog No.	Formulation	Size
V3663-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3663-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3663SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3663IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

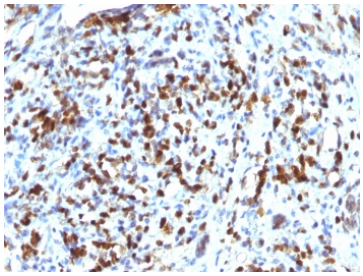
Recombinant RABBIT MONOCLONAL

Bulk quote request

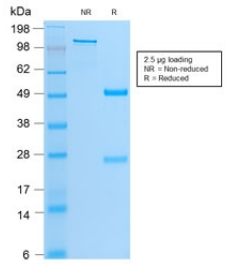
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MYOD1/2075R
Purity	Protein A affinity chromatography
UniProt	P15172
Localization	Nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This recombinant MyoD antibody is available for research use only.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using MyoD antibody (clone MYOD1/2075R). These results demonstrate the foremost specificity of the MYOD1/2075R mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



IHC testing of FFPE human Rhabdomyosarcoma with recombinant MyoD antibody (clone MYOD1/2075R). Required HIER: boil tissue sections in 10mM Tris with 1mM EDTA, pH9, for 10-20 min followed by cooling at RT for 20 min.



SDS-PAGE analysis of purified, BSA-free recombinant MyoD antibody (clone MYOD1/2075R) as confirmation of integrity and purity.

Description

Recombinant MyoD antibody detects Myogenic Differentiation 1, a master transcription factor that initiates skeletal muscle lineage commitment. Encoded by the MYOD1 gene, MyoD belongs to the basic helix loop helix family of transcription factors and is essential for converting multipotent cells into myoblasts. Because of its unique ability to reprogram cell fate, MyoD is a central subject in developmental biology, regeneration research, and oncology.

MyoD binds DNA at E box motifs, where it activates genes required for myogenic differentiation. It works cooperatively with other myogenic regulatory factors, including Myf5, myogenin, and MRF4, to orchestrate muscle fiber formation. MyoD can also convert non muscle cell types into myogenic lineages, underscoring its potency as a lineage determining factor. In cancers such as rhabdomyosarcoma, altered MyoD activity contributes to tumor biology.

The Recombinant MyoD antibody clone MYOD1/2075R provides reliable and consistent detection. Recombinant production eliminates variability between lots, ensuring reproducibility across studies. Clone MYOD1/2075R has been used in developmental research to trace muscle formation, in regenerative medicine to study muscle repair, and in oncology to evaluate muscle derived tumors. Its nuclear detection pattern aligns with the role of MyoD as a transcription factor.

Research using clone MYOD1/2075R has clarified how MyoD regulates chromatin remodeling, gene activation, and stem cell plasticity. It has also supported studies on muscle wasting conditions and repair mechanisms following injury. This antibody continues to support investigations into both normal development and pathological contexts where MyoD plays a role.

NSJ Bioreagents provides this Recombinant MyoD antibody to advance studies of skeletal muscle biology. The protein is also known as MYOD1 antibody, myogenic factor 3 antibody, basic helix loop helix protein antibody, and muscle determination protein antibody, reflecting the range of terminology used in the literature.

Application Notes

The optimal dilution of the recombinant MyoD antibody for each application 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 protein was used as the immunogen for this recombinant MyoD antibody.

Storage

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

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