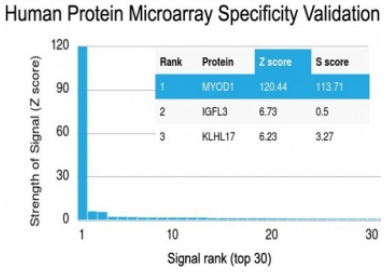
Recombinant MyoD1 Antibody [clone rMYD712] (V3664)

Catalog No.	Formulation	Size
V3664-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3664-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3664SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3664IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

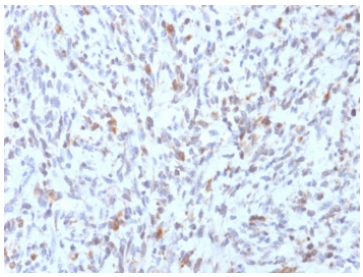
Recombinant MOUSE MONOCLONAL

Bulk quote request

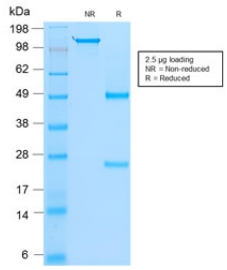
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rMYD712
Purity	Protein G affinity chromatography
UniProt	P15172
Localization	Nuclear. Only nuclear staining should be considered as evidence of skeletal muscle differentiation.
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This recombinant MyoD1 antibody is available for research use only.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant MyoD1 antibody (clone rMYD712). These results demonstrate the foremost specificity of the rMYD712 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 MyoD1 antibody (clone rMYD712). 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 MyoD1 antibody (clone rMYD712) as confirmation of integrity and purity.

Description

Recombinant MyoD1 antibody is designed to recognize MyoD1, a transcription factor encoded by the MYOD1 gene that drives skeletal muscle cell fate. MyoD1 is regarded as a master regulator of myogenesis, initiating programs that convert precursor cells into differentiated myocytes. Its capacity to control lineage reprogramming has made it a valuable target for research in cell biology, muscle disease, and cancer.

MyoD1 activates transcription by binding DNA at E box motifs, where it recruits chromatin remodeling complexes and transcriptional machinery. It works in conjunction with other myogenic regulatory factors such as Myf5 and myogenin to complete muscle differentiation. Dysregulation of MyoD1 has been linked to rhabdomyosarcoma and other tumors with muscle characteristics, where its expression can serve as a diagnostic marker.

The Recombinant MyoD1 antibody clone rMYD712 ensures reproducible and accurate detection. Recombinant technology guarantees lot to lot consistency, improving the reliability of experimental outcomes. Clone rMYD712 has been employed in muscle biology to monitor differentiation, in regenerative research to evaluate repair processes, and in pathology to identify muscle lineage tumors. Its precision makes it suitable for both experimental and diagnostic contexts.

Studies with clone rMYD712 have revealed how MyoD1 controls chromatin accessibility and transcriptional cascades that define muscle identity. It also plays a role in experimental reprogramming, where forced expression of MyoD1 can convert fibroblasts and other cells into muscle like cells. These findings underscore its importance as a model for cell fate control and regenerative potential.

NSJ Bioreagents supplies this Recombinant MyoD1 antibody to support high quality research in muscle development and disease. The protein is also known as MYOD1 antibody, myogenic factor antibody, myoblast determination protein antibody, and skeletal muscle transcription factor antibody, reflecting the varied terms used in scientific literature.

Application Notes

The optimal dilution of the recombinant MyoD1 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 MyoD1 antibody.

Storage

Store the recombinant MyoD1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).