

Datasheet for 200-301-H94**MyoD Antibody****Overview**

Description:	Anti-MyoD (MOUSE) Monoclonal Antibody - 200-301-H94
Item No.:	200-301-H94
Size:	100 µg
Applications:	FC, IF, IHC, IP, WB
Reactivity:	Human
Host Species:	Mouse

Product Details

Background:	Anti-MyoD Antibody detects MyoD. The Myogenic determination gene (MyoD) was first identified by the virtue of its ability to convert embryonic mouse fibroblast cells to muscle cells. It was subsequently shown that forced expression of MyoD (human homolog is myf 3) gene in a wide variety of normal and neoplastic cells could either convert the cells to muscle cells or activate a set of the otherwise transcriptionally inactive muscle-specific genes in these cells. The regulatory domain of the MyoD gene product lies within a 70 amino acid region and comprises a basic DNA binding motif and a helix-loop-helix (HLH) dimerization motif. Subsequent studies identified three other genes whose products shared sequence homology for the basic HLH domain of MyoD. These are: myf5, myogenin (human homolog is myf4) and myf6 (also known as MRF4 and herculin). Anti-MyoD Antibody is ideal for investigators involved in cell cycle protein, cytokines and growth factors.
Synonyms:	Myod, Myoblast determination protein 1, Class C basic helix-loop-helix protein 1, bHLHc1, Myogenic factor 3, Myf-3
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	5.8A
Format:	IgG1

Target Details

Gene Name:	Myod1
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Reactivity:	Human
Immunogen Type:	Recombinant Protein
Immunogen:	MyoD Antibody was produced in mice prepared by repeated immunizations with recombinant mouse MyoD protein at an internal amino acid sequence.
Purity/Specificity:	Anti-MyoD Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with Anti-MyoD from Human, Cat, Rat, and Mouse based on 100% homology with the immunizing sequence. Cross-reactivity with Anti-MyoD from other sources has not been determined.
Relevant Links:	• UniProtKB - P10085 • NCBI - NP_034996.2 • GeneID - 17927

Application Details

Tested Applications:	FC, IF, IHC, IP, WB
Application Note:	Anti-MyoD Antibody is tested for use in WB, Flow, ICC/IF, IHC, IHC-Fr, IHC-P, and IP. Expect a band approximately 45kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	5 µg/mL
IP:	1 µg/mL
WB:	1 µg/mL

Formulation

Physical State:	Liquid
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide

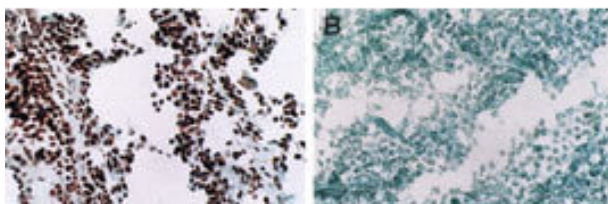
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

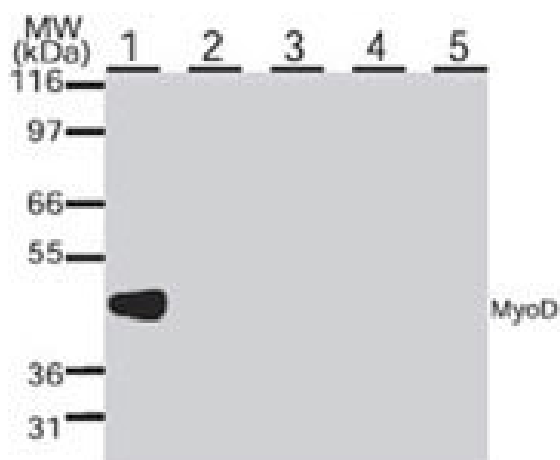
Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry

Immunohistochemistry of mouse Anti-MyoD antibody.
 Tissue A: Human Rhabdomyosarcoma. Tissue B: Human Lymphoma. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: MyoD antibody at 5 µg/ml for 1 h at RT. Secondary antibody: Peroxidase mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: MyoD is nuclear. Staining: Nuclei are stained in tissue A, staining is absent in tissue B.



Western Blot

Western Blot of Mouse Anti-MyoD antibody. Lane 1: Positive anti-MyoD reaction in the Rhabdomyosarcoma cell line. Lane 2: Negative anti-MyoD reaction in primitive neuroectodermal. Lane 3: Negative reaction in lymphoma neuroblastoma. Lane 4: Negative reaction in Ewing's sarcoma cell line. Primary antibody: MITF antibody at 1 µg/mL for overnight at 4°C. Secondary antibody: IRDye800™ mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 45 kDa for Anti-MyoD. Other band (s): none.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.