

Datasheet for 209-301-F23**DUX4 Antibody****Overview**

Description:	Anti-DUX4 (MOUSE) Monoclonal Antibody - 209-301-F23
Item No.:	209-301-F23
Size:	100 µg
Applications:	IF, WB
Reactivity:	Human
Host Species:	Mouse

Product Details

Background:	DUX4, or double homeobox4, is a human protein that is a transcriptional activator of paired-like homeodomain transcription factor 1. Clinically it is a facioscapulohumeral muscular dystrophy candidate gene that appears to have a toxic gain of function. In FSHD individuals, the expression of the full-length DUX4 transcript is not completely suppressed in skeletal muscle and possibly other differentiated tissues.
Synonyms:	mouse anti-DUX4 Antibody, Double homeobox protein 4, Double homeobox protein 10, DUX4, DUX10
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	P2B1
Format:	IgG1

Target Details

Gene Name:	DUX4
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	DUX4 Antibody was produced in mice by repeated immunizations with a recombinant protein corresponding to the C-terminal region of human DUX4 protein.

Purity/Specificity: Anti-DUX4 Antibody was purified by Protein G chromatography. This monoclonal antibody is specific for human DUX4 protein. A BLAST analysis was used to suggest cross-reactivity with DUX4 from human based on 100% homology with the immunizing sequence. It does not cross react with DUX4c. Cross-reactivity with DUX4 from other sources has not been determined. Transcription Factor research.

Relevant Links:

- [NCBI - NP_001280727.1](#)
- [GeneID - 100288687](#)
- [UniProtKB - Q9UBX2](#)

Application Details

Tested Applications:	IF, WB
Application Note:	Anti-DUX4 Antibody is tested for use in WB and IF and suitable for IHC. 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.
IF:	User Optimized
IHC:	User Optimized
WB:	1:1000

Formulation

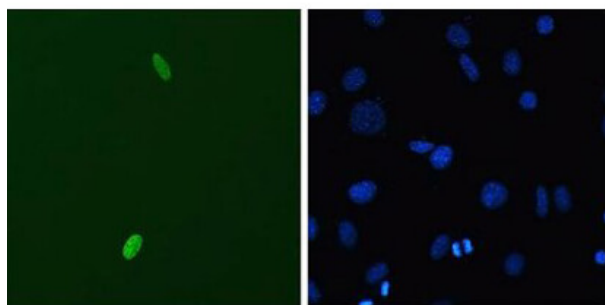
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL neat
Buffer:	1X PBS, pH 7.4
Preservative:	0.09% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Wet Ice
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.

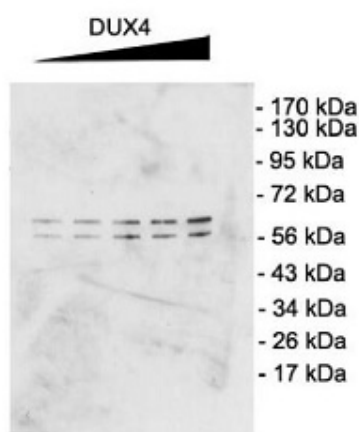
Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

Immunofluorescence Microscopy of Mouse anti-DUX4 antibody. Tissue: C2C12 myoblasts. Fixation: 0.5% PFA. Antigen retrieval: pCS2+DUX4. Primary antibody: DUX4 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: DUX4 is cytoplasmic. Staining: DUX4 as green fluorescent signal with DAPI (blue) nuclear counterstain.



Western Blot

Western Blot of Mouse anti-DUX4 antibody. Lane 1-5: C2C12 cells transfected with pCS2+DUX4. Load: 35 µg per lane. Primary antibody: DUX4 antibody at 1:1000 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: 51.1 kDa, ~65,56 kDa for DUX4. 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.