10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DUX4 Antibody
DUX4 Antibody, Clone P2B1
Catalog # ASM10140

Specification

DUX4 Antibody - Product Information

Application	**WB**
Primary Accession	F5GZ66
Other Accession	NP_149418.3
Host	**Mouse**
Isotype	**IgG1**
Reactivity	**Human, Mouse**
Clonality	**Monoclonal**

Description
Mouse Anti-Human DUX4 Monoclonal IgG1

Target/Specificity
Detects ~45kDa. No cross-reactivity with DUX4c.

Other Names
Double homeobox 4 Antibody, Double homeobox 10 Antibody, DUX10 Antibody, Double homeobox protein 4/10 Antibody

Immunogen
C-terminal 76 amino acids of DUX4 with glutathione-s-transferase (gst) tag

Purification
Protein G Purified

Storage	**-20ºC**

Storage Buffer
PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
1 µg/ml of SMC-192 was sufficient for detection of DUX4 in 20 µg of HeLa cell lysate by ECL immunoblot analysis using goat anti-mouse IgG: HRP as teh secondary.

Cellular Localization
Nucleus

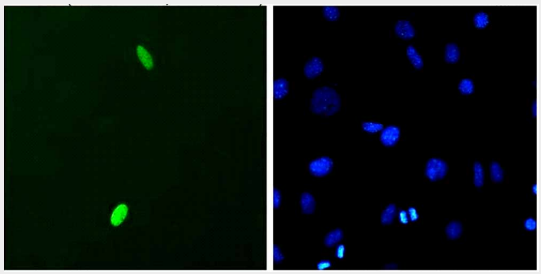
DUX4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

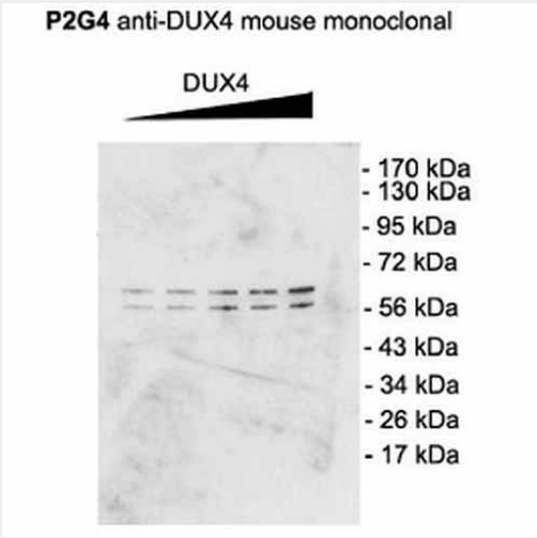
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DUX4 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-DUX4 Monoclonal Antibody, Clone P2B1 (ASM10140). Tissue: C2C12 myoblast cells. Species: Mouse. Primary Antibody: Mouse Anti-DUX4 Monoclonal Antibody (ASM10140) at 1:1000. Secondary Antibody: FITC Goat Anti-Mouse (green). Counterstain: DAPI (blue) nuclear stain.



Western Blot analysis of Mouse C2C12 cell lysate showing detection of DUX4 protein using Mouse Anti-DUX4 Monoclonal Antibody, Clone P2B1 (ASM10140). Primary Antibody: Mouse Anti-DUX4 Monoclonal Antibody (ASM10140) at 1:1000. Cells transfected with pCS2+DUX4 which, contains an additional upstream start site.

DUX4 Antibody - Background

DUX4, or double homeobox4, is a human protein that is a transcriptional activator of paired-like homeodomain transcription factor 1 (1). Clinically it is a facioscapulohumeral muscular dystrophy candidate gene that appears to have a toxic gain of function (2-4). In FSHD individuals, the expression of the full-length DUX4 transcript is not completely suppressed in skeletal muscle and possibly other differentiated tissues (5).

DUX4 Antibody - References

1. Entrez Gene: “Dux4 Double Homeobox, 4”
2. Dixit M., et al., (2007) Proc. Natl Acad Sci. USA. 104(46): 18157-18162.
3. Kowaljow V., et al. (2007) Neuromuscl Disord. 17(8): 611-623.

4. Lemmers R., et al. (2010) Science Express. 329(5999): 1650-1653.
5. Snider L., et al. (2010) PLoS Genetics. 6:1-14.