

DUX4 Antibody

DUX4 Antibody, Clone P2B1 Catalog # ASM10140

Specification

DUX4 Antibody - Product Information

Application WB, IHC, ICC
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 -20°C

Storage Buffer

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

Shipping Temperature Blue Ice or 4°C

Certificate of Analysis

 $1~\mu g/ml$ 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

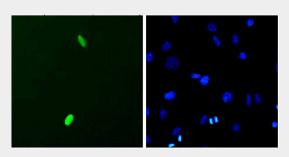
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

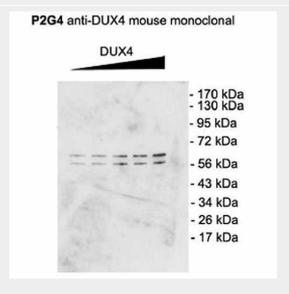


- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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.

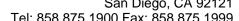
DUX4 Antibody - Background

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.