

## **DUX4 Antibody**

DUX4 Antibody, Clone P2B1 Catalog # ASM10140

## **Specification**

#### **DUX4 Antibody - Product Information**

Application ICC/IF, WB
Primary Accession Other Accession 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 Blue Ice or 4ºC

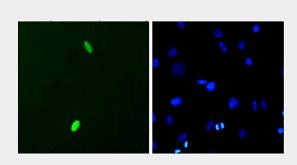
Temperature

**Certificate of Analysis** 

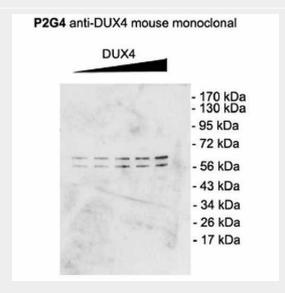
 $1~\mu g/ml$  of SMC-192 was sufficient for detection of DUX4 in 20  $\mu g$  of HeLa cell lysate by ECL immunoblot analysis using goat anti-mouse IgG: HRP as teh secondary.

# Cellular Localization Nucleus

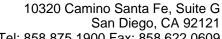
## **DUX4 Antibody - Protocols**



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.



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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **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.