

# DUX4 monoclonal antibody, clone P2B1 (APC)

Catalog # MAB11452      Size 100 ug

## Applications

### Application Data with Unconjugated Antibody

#### Immunofluorescence

□

Immunofluorescent staining of C2C12 cells transfected pCS2+DUX4 with DUX4 monoclonal antibody, clone P2B1 (Cat # MAB11442) at 10 ug/mL (left). Counter-stained with DAPI for nuclei (right).

### Application Data with Unconjugated Antibody

#### Western Blot (Transfected lysate)

□

Western blot analysis of C2C12 cells transfected with pCS2+DUX4 which contains an additional upstream start site with DUX4 monoclonal antibody, clone P2B1 (Cat # MAB11442).

## Specification

<b>Product Description</b>	Mouse monoclonal antibody raised against recombinant partial DUX4.
<b>Immunogen</b>	Recombinant GST fusion protein corresponding to a 76 amino acid fragment at C-terminus of human DUX4.
<b>Host</b>	Mouse
<b>Reactivity</b>	Human
<b>Specificity</b>	This antibody recognizes human DUX4. It does not cross-react with DUX4c.
<b>Form</b>	Liquid
<b>Conjugation</b>	APC

Purification	Protein G purification
Isotype	IgG1
Recommend Usage	Western Blot (1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (50% glycerol, 0.09% sodium azide)
Storage Instruction	Store at 4°C. Aliquot to avoid repeated freezing and thawing.
Note	Application Data with Unconjugated Antibody Immunofluorescence Immunofluorescent staining of C2C12 cells transfected pCS2+DUX4 with DUX4 monoclonal antibody, clone P2B1 (Cat # MAB11442) at 10 ug/mL (left). Counter-stained with DAPI for nuclei (right). Western Blot (Transfected lysate) Western blot analysis of C2C12 cells transfected with pCS2+DUX4 which contains an additional upstream start site with DUX4 monoclonal antibody, clone P2B1 (Cat # MAB11442).

## Applications

- Western Blot (Transfected lysate)
- Immunohistochemistry
- Immunofluorescence

## Gene Info — DUX4

Entrez GeneID	<a href="#">22947</a>
Protein Accession#	<a href="#">NP_149418.3</a>
Gene Name	DUX4
Gene Alias	DUX10
Gene Description	double homeobox, 4
Omim ID	<a href="#">606009</a>
Gene Ontology	<a href="#">Hyperlink</a>

**Gene Summary**

This gene is located within a D4Z4 repeat array in the subtelomeric region of chromosome 4q. The D4Z4 repeat is polymorphic in length; a similar D4Z4 repeat array has been identified on chromosome 10. Each D4Z4 repeat unit has an open reading frame (named DUX4) that contains two homeoboxes; the repeat-array and ORF is conserved in other mammals. There was no evidence for transcription from standard cDNA libraries however RTPCR and in-vitro expression experiments indicate that the ORF is transcribed and the encoded protein has been reported to function as a transcriptional activator of paired-like homeodomain transcription factor 1 (PITX1; GeneID 5307). Contraction of the microsatellite repeat causes autosomal dominant facioscapulohumeral muscular dystrophy (FSHD). [provided by RefSeq]

**Other Designations**

double homeobox protein 4|double homeobox protein DUX10

**Disease**

- [Muscular Dystrophy](#)