

Product datasheet for TA336793

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Dux4 (DUX4L1) Mouse Monoclonal Antibody [Clone ID: P4H2]

Product data:

Product Type: Primary Antibodies

Clone Name: P4H2

Applications: ELISA, ICC/IF, IHC, Simple Western, WB

Recommended Dilution: Immunohistochemistry: 1:100-1:200, Immunocytochemistry/ Immunofluorescence: 1:100-

1:200, Western Blot: 0.5-2.0ug/ml, Immunohistochemistry-Paraffin: 1:100-1:200,

Immunohistochemistry-Frozen: 1:100-1:200, Simple Western: 1:10, ELISA

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Synthetic peptide corresponding to the C-terminus of human DUX4. [Swiss-Prot# Q9UBX2]

Formulation: PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -

20C long term. Avoid freeze-thaw cycles.

Concentration: lot specific

Purification: Protein G purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 52 kDa

Gene Name: double homeobox 4 like 1

Database Link: NP 149418

Entrez Gene 22947 Human





Background:

DUX4 (also known as Double homeobox 4) is the leading candidate causative gene for facioscapulohumeral dystrophy (FSHD), a degenerative skeletal muscle disease and one of the most common muscular dystrophies. FSHD is caused by the deletion of a subset of D4Z4 macrosatellite repeats on chromosome 4. Each repeat contains a retrogene encoding the double-homeobox factor DUX4. DUX4 expression is epigenetically suppressed in differentiated tissues and the residual DUX4 transcripts are spliced to remove the carboxyterminal domain that has been associated with cell toxicity. In FSHD individuals, the expression of the full-length DUX4 transcript is not completely suppressed in skeletal muscle, and possibly other differentiated tissues, and results in a small percentage of cells expressing relatively abundant amounts of the full-length DUX4 mRNA and protein. [Snider et al. (2010) PLoS Genetics.6(10): e1001181]

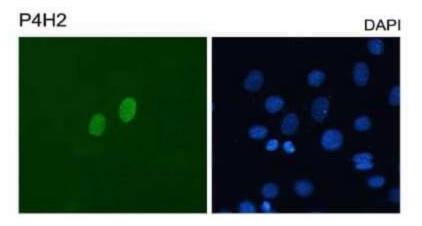
Synonyms: DUX10

Note: This DUX4 antibody is useful for Immunocytochemistry/Immunofluorescence,

Immunohistochemistry frozen sections, Immunohistochemistry paraffin embedded sections

and Western Blot. In Western blot, a band can be seen at ~52 kDa.

Product images:

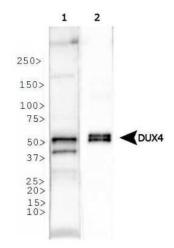


Immunocytochemistry/Immunofluorescence: DUX4 Antibody (P4H2) TA336793 - Detection of human DUX4 on C2C12 mouse myoblasts transfected with pCS2-DUX4. Cells were counterstained with DAPI for nuclei.

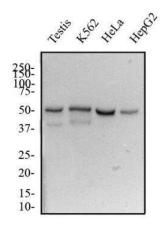




Simple Western: DUX4 Antibody (P4H2) TA336793 - Lane view shows a specific band for DUX4 in 0.5 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.

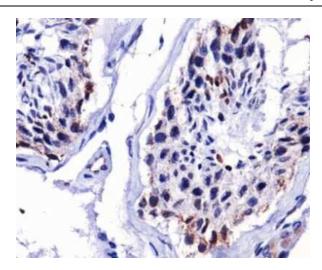


Western Blot: DUX4 Antibody (P4H2) TA336793 - Analysis of DUX4 expression in (1) human testis and (2) DUX4 protein lysates.



Western Blot: DUX4 Antibody (P4H2) TA336793 - Total protein from human testis tissue and human K562, HeLa and HepG2 cell lines was separated on a 12% gel by SDS-PAGE, transferred to PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 2.0 ug/ml anti-DUX4 in 1% non-fat milk in TBST and detected with an anti-mouse HRP secondary antibody using chemiluminescence.





Immunohistochemistry: DUX4 Antibody (P4H2) TA336793 - Analysis of DUX4 on human testis