

DUX4 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11636C

Specification

DUX4 Antibody (Center) - Product Information

Application	WB, FC,E
Primary Accession	Q9UBX2
Other Accession	Q6RFH8 , P0CJ90 , P0CJ89 , P0CJ88 , P0CJ87 , P0CJ86 , P0CJ85
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Antigen Region	246-275

DUX4 Antibody (Center) - Additional Information

Gene ID 100288687

Other Names

Double homeobox protein 4
{ECO:0000312|HGNC:HGNC:50800},
Double homeobox protein 10
{ECO:0000312|EMBL:AAK915091}, DUX4
(HGNC:50800),
DUX10

Target/Specificity

This DUX4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 246-275 amino acids from the Central region of human DUX4.

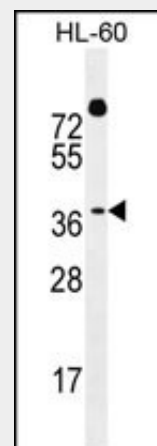
Dilution

WB~~1:2000
FC~~1:25

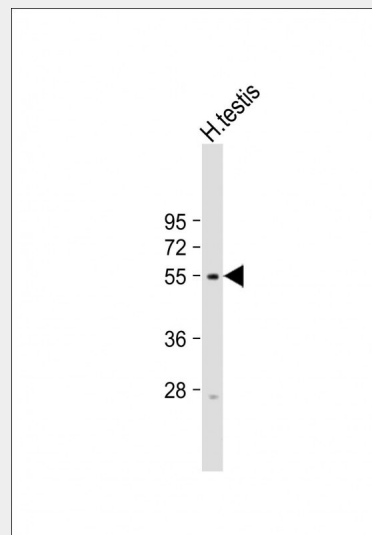
Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage



DUX4 Antibody (Center) (Cat. #AP11636c) western blot analysis in HL-60 cell line lysates (35ug/lane). This demonstrates the DUX4 antibody detected the DUX4 protein (arrow).



Anti-DUX4 Antibody (Center) at 1:2000 dilution + Human testis lysate
Lysates/proteins at 20 µg per lane.
Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.
Predicted band size : 45 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

DUX4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

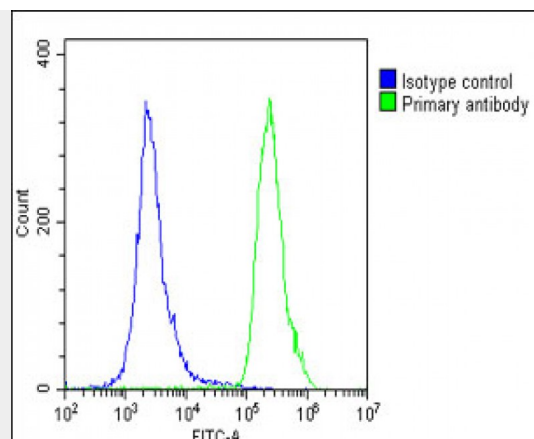
DUX4 Antibody (Center) - Protein Information

Name DUX4 ([HGNC:50800](https://www.ncbi.nlm.nih.gov/ncbiurl/5680282))

Synonyms DUX10

Function

[Isoform 1]: Transcription factor that is selectively and transiently expressed in cleavage-stage embryos (PubMed: [28459457](http://www.uniprot.org/citations/28459457)). Binds to double-stranded DNA elements with the consensus sequence 5'-TAATCTAATCA-3' (PubMed: [28459457](http://www.uniprot.org/citations/28459457)). Binds to chromatin containing histone H3 acetylated at 'Lys-27' (H3K27ac) and promotes deacetylation of H3K27ac. In parallel, binds to chromatin that lacks histone H3 acetylation at 'Lys-27' (H3K27ac) and recruits EP300 and CREBBP to promote acetylation of histone H3 at 'Lys-27' at new sites (PubMed: [26951377](http://www.uniprot.org/citations/26951377)). Involved in transcriptional regulation of numerous genes, primarily as transcriptional activator, but mediates also repression of a set of target genes (PubMed: [17984056](http://www.uniprot.org/citations/17984056)).



Overlay histogram showing U-2 OS cells stained with AP11636c (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP11636c, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed (1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1 µg/1x10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.

DUX4 Antibody (Center) - Background

DUX4 may be involved in transcriptional regulation.

tations/27378237"
target="_blank">27378237,
PubMed:<a href="http://www.uniprot.org/ci
tations/26951377"
target="_blank">26951377,
PubMed:<a href="http://www.uniprot.org/ci
tations/28459457"
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PubMed:<a href="http://www.uniprot.org/ci
tations/28459454"
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PubMed:<a href="http://www.uniprot.org/ci
tations/29618456"
target="_blank">29618456,
PubMed:<a href="http://www.uniprot.org/ci
tations/30540931"
target="_blank">30540931,
PubMed:<a href="http://www.uniprot.org/ci
tations/29572508"
target="_blank">29572508).
Promotes expression of ZSCAN4 and
KDM4E, two proteins with essential roles
during early embryogenesis (PubMed:<a hr
ef="http://www.uniprot.org/citations/27378
237" target="_blank">27378237,
PubMed:<a href="http://www.uniprot.org/ci
tations/26951377"
target="_blank">26951377,
PubMed:<a href="http://www.uniprot.org/ci
tations/28459457"
target="_blank">28459457,
PubMed:<a href="http://www.uniprot.org/ci
tations/29618456"
target="_blank">29618456).
Heterologous expression in cultured
embryonic stem cells mediates also
transcription of HERVL retrotransposons
and transcripts derived from ACRO1 and
HSATII satellite repeats (PubMed:<a href=" "
http://www.uniprot.org/citations/28459457"
target="_blank">28459457). May
activate expression of PITX1 (PubMed:<a hr
ef="http://www.uniprot.org/citations/17984
056" target="_blank">17984056).
May regulate microRNA (miRNA) expression
(PubMed:<a href="http://www.uniprot.org/c
itations/24145033"
target="_blank">24145033).
Inappropriate expression can inhibit
myogenesis and promote apoptosis
(PubMed:<a href="http://www.uniprot.org/c
itations/26951377"
target="_blank">26951377,
PubMed:<a href="http://www.uniprot.org/ci
tations/28935672"
target="_blank">28935672,
PubMed:<a href="http://www.uniprot.org/ci

tations/29618456"
target="_blank">29618456).

Cellular Location

[Isoform 1]: Nucleus
{ECO:0000255|PROSITE-
ProRule:PRU00108,
ECO:0000269|PubMed:15709750,
ECO:0000269|PubMed:17984056,
ECO:0000269|PubMed:21060811,
ECO:0000269|PubMed:26951377,
ECO:0000269|PubMed:27378237,
ECO:0000269|PubMed:28459457,
ECO:0000269|PubMed:29618456}
Note=Actively transported through the
nuclear pore complex (NPC)

Tissue Location

Isoform 1: Does not seem to be expressed
in normal muscle, but is detected in muscle
of individuals with FSHD, and also in testis
(at protein level) (PubMed:21060811,
PubMed:17984056). Isoform 1: Does not
seem to be expressed in normal muscle,
but in muscle of individuals with FSHD,
where it may be toxic to cells
(PubMed:21060811, PubMed:17984056).
Isoform 2: Detected in skeletal muscle,
fibroblasts and testis from healthy
individuals (PubMed:21060811)

DUX4 Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)