

DUX4 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP13022b**Specification**

DUX4 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q9UBX2](#)**DUX4 Antibody (C-term) Blocking peptide - 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 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=50800)
target="_blank">HGNC:50800), DUX10

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DUX4 Antibody (C-term) Blocking peptide - Protein Information**Name** DUX4 ([HGNC:50800](#))**Synonyms** DUX10**Function**

[Isoform 1]: Transcription factor that is selectively and transiently expressed in cleavage-stage embryos (PubMed:<http://www.uniprot.org/citations/28459457>)
target="_blank">28459457). Binds to double-stranded DNA elements with the consensus sequence 5'- TAATCTAATCA-3' (PubMed:<http://www.uniprot.org/citations/28459454>)
target="_blank">28459454, PubMed:<http://www.uniprot.org/citations/28459457>)
target="_blank">28459457, PubMed:<http://www.uniprot.org/citations/29572508>)
target="_blank">29572508, PubMed:<http://www.uniprot.org/citations/30315230>)
target="_blank">30315230, PubMed:<http://www.uniprot.org/citations/30540931>)
target="_blank">30540931). 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:<http://www.uniprot.org/citations/26951377>)
target="_blank">26951377). Involved in

transcriptional regulation of numerous genes, primarily as transcriptional activator, but also mediates repression of a set of target genes (PubMed:17984056, PubMed:26951377, PubMed:27378237, PubMed:28459454, PubMed:28459457, PubMed:29572508, PubMed:29618456, PubMed:30540931). Promotes expression of ZSCAN4 and KDM4E, two proteins with essential roles during early embryogenesis (PubMed:26951377, PubMed:27378237, PubMed:28459457, PubMed:29618456). Promotes nuclear translocation of CTNNB1/beta-catenin and its subsequent activation of target genes (PubMed:36158201). Heterologous expression in cultured embryonic stem cells mediates transcription of HERVL retrotransposons and transcripts derived from ACRO1 and HSATII satellite repeats (PubMed:28459457). May activate expression of PITX1 (PubMed:17984056). May regulate microRNA (miRNA) expression (PubMed:24145033). Inappropriate expression can inhibit myogenesis and promote apoptosis (PubMed:26951377, PubMed:28935672, PubMed: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:26816005, ECO:0000269|PubMed:26951377, ECO:0000269|PubMed:27378237, ECO:0000269|PubMed:28459457, ECO:0000269|PubMed:29618456}. Cytoplasm 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:17984056, PubMed:21060811). 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:17984056, PubMed:21060811). Isoform 2: Detected in skeletal muscle, fibroblasts and testis from healthy individuals (PubMed:21060811)

DUX4 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

DUX4 Antibody (C-term) Blocking peptide - Images

DUX4 Antibody (C-term) Blocking peptide - Background

DUX4 may be involved in transcriptional regulation.