

DUX4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP13022B

Product Information

Application	WB, FC, E
Primary Accession	Q9UBX2
Other Accession	P0CJ90 , P0CJ89 , P0CJ88 , P0CJ87 , P0CJ86 , P0CJ85
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32790
Calculated MW	44940
Antigen Region	376-404

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 376-404 amino acids from the C-terminal region of human DUX4.
Dilution	WB~~1:2000 FC~~1:25 E~~Use at an assay dependent concentration.
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	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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DUX4 (HGNC:50800)
Synonyms	DUX10

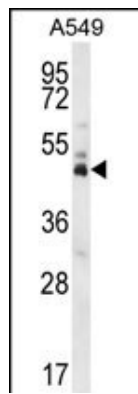
Function	<p>[Isoform 1]: Transcription factor that is selectively and transiently expressed in cleavage-stage embryos (PubMed:28459457). Binds to double-stranded DNA elements with the consensus sequence 5'- TAATCTAATCA-3' (PubMed:28459454, PubMed:28459457, PubMed:29572508, PubMed:30315230, PubMed:30540931). 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: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).</p>
Cellular Location	<p>[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)</p>
Tissue Location	<p>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)</p>

Background

DUX4 may be involved in transcriptional regulation.

Images

DUX4 Antibody (C-term) (Cat. #AP13022b) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the DUX4 antibody detected the DUX4 protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.