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ARGLU1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9290a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q9NWB6
Other Accession	Q2TA42
Reactivity	Human
Predicted	Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23842
Calculated MW	33216
Antigen Region	48-74

Additional Information

Gene ID	55082
Other Names	Arginine and glutamate-rich protein 1, ARGLU1
Target/Specificity	This ARGLU1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 48-74 amino acids from the N-terminal region of human ARGLU1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	ARGLU1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ARGLU1
Function	Dual function regulator of gene expression; regulator of transcription and modulator of alternative splicing (PubMed:30698747). General coactivator of

nuclear receptor-induced gene expression, including genes activated by the glucocorticoid receptor NR3C1 (PubMed:30698747). Binds to a subset of pre-mRNAs and to components of the spliceosome machinery to directly modulate basal alternative splicing; involved in simple and complex cassette exon splicing events (PubMed:30698747). Binds its own pre-mRNA and regulates its alternative splicing and degradation; one of the alternatively spliced products is a stable intronic sequence RNA (sisRNA) that binds the protein to regulate its ability to affect splicing (PubMed:27899669, PubMed:36533631). Binding of the sisRNA stimulates phase separation and localization to nuclear speckles, which may contribute to activation of nuclear receptor-induced gene expression (PubMed:36533631). May also indirectly modulate alternative splicing (PubMed:30698747). Regulates transcription of genes involved in heart development, neuronal cell function, protein localization and chromatin localization (By similarity). Regulates splicing of genes involved in neurogenesis and chromatin organization (By similarity). Essential for central nervous system development (By similarity). Required for the estrogen-dependent expression of ESR1 target genes (PubMed:21454576). Can act in cooperation with MED1 (PubMed:21454576).

Cellular Location

Nucleus. Nucleus speckle. Chromosome. Note=Recruited, in an estrogen-dependent manner, to ESR1 target gene promoters (PubMed:21454576). Colocalizes with MED1 in nuclear speckles (PubMed:21454576, PubMed:36533631) Binding of sisRNA promotes phase separation and localization to nuclear speckles (PubMed:36533631). Associated with glucocorticoid response elements of target genes, even in the absence of glucocorticoid receptor ligands (By similarity). {ECO:0000250|UniProtKB:Q3UL36, ECO:0000269|PubMed:21454576, ECO:0000269|PubMed:36533631}

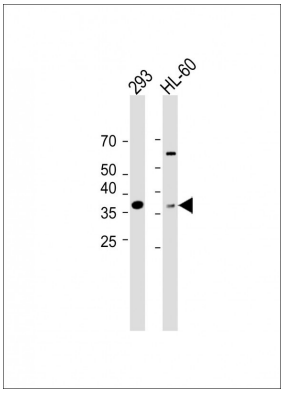
Background

ARGLU1 belongs to the UPF0430 family. There are two named isoforms.

References

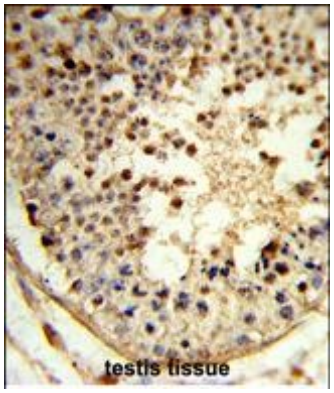
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Beausoleil,S.A., et.al., Proc. Natl. Acad. Sci. U.S.A. 101 (33), 12130-12135 (2004)
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Images

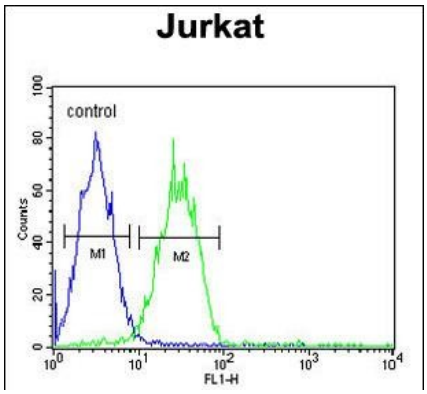


All lanes: Anti-ARGLU1 Antibody (N-term) at 1:1000 dilution Lane 1: 293 whole cell lysate Lane 2: HL-60 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 37 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Formalin-fixed and paraffin-embedded human testis tissue reacted with ARGLU1 Antibody (N-term), which was



peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



ARGLU1 Antibody (N-term) (Cat. #AP9290a) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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