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ARGLU1 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP9290a

Specification

ARGLU1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q9NWB6

ARGLU1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 55082

Other Names
Arginine and glutamate-rich protein 1, ARGLU1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP9290a was selected from the N-term region of human ARGLU1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

ARGLU1 Antibody (N-term) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/36533631"

target="_blank">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}

ARGLU1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

ARGLU1 Antibody (N-term) Blocking Peptide - Images

ARGLU1 Antibody (N-term) Blocking Peptide - Background

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

ARGLU1 Antibody (N-term) Blocking Peptide - References

Olsen,J.V., et.al, Cell 127 (3), 635-648 (2006)Beausoleil,S.A., et.al., Proc. Natl. Acad. Sci. U.S.A. 101 (33), 12130-12135 (2004)Beausoleil,S.A., et.al, Proc. Natl. Acad. Sci. U.S.A. 101 (33), 12130-12135 (2004)