

Arx Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2701a

Specification

Arx Antibody (N-term) - Product Information

Application WB,E
Primary Accession Q96OS3
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 38-67

Arx Antibody (N-term) - Additional Information

Gene ID 170302

Other Names

Homeobox protein ARX, Aristaless-related homeobox, Arx

Target/Specificity

This Arx antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 38-67 amino acids from the N-terminal region of human Arx.

Dilution

WB~~1:1000

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

Arx Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Arx Antibody (N-term) - Protein Information

Name ARX

Function Transcription factor (PubMed: <u>22194193</u>, PubMed: <u>31691806</u>). Binds to specific sequence motif 5'-TAATTA-3' in regulatory elements of target genes, such as histone demethylase KDM5C (PubMed: <u>22194193</u>, PubMed: <u>31691806</u>). Positively modulates transcription of KDM5C



(PubMed:31691806). Activates expression of KDM5C synergistically with histone lysine demethylase PHF8 and perhaps in competition with transcription regulator ZNF711; synergy may be related to enrichment of histone H3K4me3 in regulatory elements (PubMed:31691806). Required for normal brain development (PubMed:11889467, PubMed:12379852, PubMed:14722918). Plays a role in neuronal proliferation, interneuronal migration and differentiation in the embryonic forebrain (By similarity). May also be involved in axonal guidance in the floor plate (By similarity).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00108, ECO:0000255|PROSITE-ProRule:PRU00138}

Tissue Location

Expressed predominantly in fetal and adult brain and skeletal muscle. Expression is specific to the telencephalon and ventral thalamus. There is an absence of expression in the cerebellum throughout development and also in adult.

Arx Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Arx Antibody (N-term) - Images

Arx Antibody (N-term) - Background

Arx contains two conserved domains, a C-peptide (or aristaless domain) and the prd-like class homeobox domain. It is a member of the group-II aristaless-related protein family whose members are expressed primarily in the central and/or peripheral nervous system. This protein is thought to be involved in CNS development. Mutations in the Arx gene cause X-linked mental retardation and epilepsy.

Arx Antibody (N-term) - References

Miura H., Mech. Dev. 65:99-109(1997).