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DYX2/KIAA0319 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54651

Specification

DYX2/KIAA0319 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q5VV43
Reactivity	**Rat, Pig, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**116 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human DYX2/KIAA0319**
Epitope Specificity	**682-760/1072**
Isotype	**IgG**
Purity affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cell membrane. Early endosome membrane. Low-abundance isoforms lacking the transmembrane domain have been described; these are secreted.**
SIMILARITY	**Contains 1 MANSC domain. Contains 5 PKD domains.**
SUBUNIT	**Homodimer. Interacts with AP2M1; required for clathrin-mediated endocytosis.**
Post-translational modifications	**N-glycosylated. O-glycosylated. Shedding of the extracellular domain and intramembrane cleavage produce several proteolytic products. The intramembrane cleavage releases a soluble cytoplasmic polypeptide that translocates to the nucleolus.**
DISEASE	**Defects in KIAA0319 may be a cause of susceptibility to dyslexia type 2 (DYX2) [MIM:600202]; also known as specific reading disability type 2. Dyslexia is a relatively common, complex cognitive disorder that affects 5% to 10% of school-aged children. The disorder is characterized by an impairment of reading performance despite adequate motivational, educational and intellectual opportunities and in the absence of sensory or neurological disability. Note=A lower expression is associated with the**

	risk haplotype.
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
DYX2 is a 1072 amino acid single-pass transmembrane protein that contains one MANSC domain and two PKD (Polycystic Kidney Disease) domains, which are usually found in the extracellular regions of proteins and are involved in protein-protein interactions. In DYX2, it is likely that its PKD domains mediate the interaction between neurons and glial fibers during neuronal migration. When overexpressed, this plasma membrane protein colocalizes with EEA1 (early endosome antigen 1) in large intracellular vesicles, suggesting that it is endocytosed and recycled. DYX2 is highly expressed in brain cortex, cerebellum, amygdala, putamen and hippocampus. Defects in the gene encoding DYX2 may be the cause of dyslexia type 2, a relatively common disorder that is characterized by reading performance impairment in the absence of sensory or neurologic disability. There are three isoforms of DYX2 that are produced as a result of alternative splicing events

DYX2/KIAA0319 Polyclonal Antibody - Additional Information

Gene ID 9856

Other Names
Dyslexia-associated protein KIAA0319, KIAA0319

Target/Specificity
Detected in adult brain cortex and fetal frontal lobe (at protein level). Highly expressed in brain cortex, putamen, amygdala, hippocampus and cerebellum.

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

DYX2/KIAA0319 Polyclonal Antibody - Protein Information

Name KIAA0319

Function
Involved in neuronal migration during development of the cerebral neocortex. May function in a cell autonomous and a non-cell autonomous manner and play a role in appropriate adhesion between migrating neurons and radial glial fibers. May also regulate growth and differentiation of dendrites.

Cellular Location
Cell membrane; Single-pass type I membrane protein. Early endosome membrane; Single-pass type I membrane protein. Note=Low-abundance isoforms lacking the transmembrane domain have been described; these are secreted

Tissue Location
Detected in adult brain cortex and fetal frontal lobe (at protein level). Highly expressed in brain cortex, putamen, amygdala, hippocampus and cerebellum.

DYX2/KIAA0319 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DYX2/KIAA0319 Polyclonal Antibody - Images