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Rabbit Anti-DYX2/KIAA0319 antibody

SL11862R

Product Name:	DYX2/KIAA0319
Chinese Name:	阅读障碍相关蛋白DLX2抗体
Alias:	DLX 2; DLX2; DYLX 2; DYLX2; Dyslexia susceptibility 2; Dyslexia-associated protein KIAA0319 DYX 2; DYX2; K0319_HUMAN; Kiaa0319; MGC176717.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	116kDa
Cellular localization:	cytoplasmicThe cell membraneSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human DYX2/KIAA0319:682-760/1072<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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 °C.
PubMed:	PubMed
Product Detail:	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

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.

Subunit:
Homodimer. Interacts with AP2M1; required for clathrin-mediated endocytosis.

Subcellular Location:
Cell membrane. Early endosome membrane. Low-abundance isoforms lacking the transmembrane domain have been described; these are secreted.

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

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.

Similarity:
Contains 1 MANSC domain.
Contains 5 PKD domains.

SWISS:

	Q5VV43 **Gene ID:** 9856 **Database links:** Entrez Gene: 520603Cow Entrez Gene: 9856Human Omim: 609269Human SwissProt: Q5VV43Human Unigene: 26441Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.