

DYX1C1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55046

Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession Q8WXU2

Reactivity Rat, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 48527
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human DYX1C1

Epitope Specificity 51-120/420 **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 Nucleus. Cytoplasm.

SIMILARITY Contains 1 CS domain. Contains 3 TPR repeats. **SUBUNIT** Interacts with ESR1 and ESR2. Interacts with STUB1.

DISEASE Defects in DYX1C1 may be a cause of susceptibility to dyslexia type 1 (DYX1)

[MIM:127700]. A relatively common, complex cognitive disorder characterized by an impairment of reading performance despite adequate motivational, educational and intellectual opportunities. It is a multifactorial trait, with evidence for familial clustering and heritability. Note=A chromosomal aberration involving DYX1C1 has been found in a family affected by dyslexia.

Translocation t(2;15)(q11;q21).

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions The gene encoding DYX1C1 maps in the 15q21 region, which is disrupted by a

translocation t(2;15)(q11;q21) and segregates with dyslexia. Two sequence changes in DYX1C1, including one involving the translation initiation sequence and an Elk-1 transcription factor binding site (-3G --> A) and a codon (1249G --> T), introduce a premature stop codon and truncate the protein by 4 amino acids. DYX1C1 encodes a nuclear tetratricopeptide repeat domain protein that is dynamically regulated in brain. In human brain, DYX1C1 protein localizes to a fraction of cortical neurons and white matter glial cells. It is also expressed

in lung, kidney and testis.

Additional Information

Gene ID 161582

Other Names Dynein assembly factor 4, axonemal {ECO:0000312 | HGNC:HGNC:21493},

Dyslexia susceptibility 1 candidate gene 1 protein, DNAAF4 (HGNC:21493),

DYX1C1, EKN1

Target/Specificity Expressed in several tissues, including brain, lung, kidney and testis. In brain

localizes to a fraction of cortical neurons and white matter glial cells.

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50

0,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C 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 °C.

Protein Information

Name DNAAF4 (HGNC:21493)

Synonyms DYX1C1, EKN1

Function Axonemal dynein assembly factor required for ciliary motility. Involved in

neuronal migration during development of the cerebral neocortex. May regulate the stability and proteasomal degradation of the estrogen receptors that play an important role in neuronal differentiation, survival and plasticity.

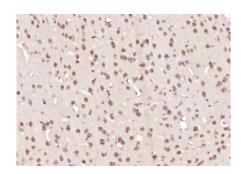
Cellular Location Nucleus. Cytoplasm. Dynein axonemal particle. Cell projection, neuron

projection {ECO:0000250|UniProtKB:Q5VJS5}

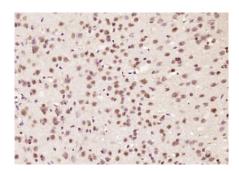
Tissue Location Expressed in several tissues, including brain, lung, kidney and testis. In brain

localizes to a fraction of cortical neurons and white matter glial cells.

Images

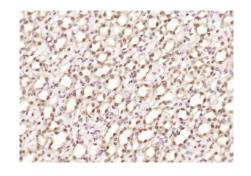


Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (DYX1C1) Polyclonal Antibody, Unconjugated (AP55046) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

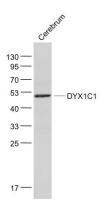


Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (DYX1C1) Polyclonal Antibody, Unconjugated (AP55046) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Paraformaldehyde-fixed, paraffin embedded (mouse kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer



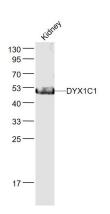
(normal goat serum) at 37°C for 30min; Antibody incubation with (DYX1C1) Polyclonal Antibody, Unconjugated (AP55046) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Sample:

Cerebrum (Mouse) Lysate at 40 ug Primary: Anti- DYX1C1 (AP55046) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 49 kD Observed band size: 49 kD



Sample:

Kidney (Mouse) Lysate at 40 ug

Primary: Anti- DYX1C1 (AP55046) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at

1/20000 dilution

Predicted band size: 49 kD Observed band size: 49 kD

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