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EB10781 - Goat Anti-Doublecortin / DCX (aa232-242) Antibody

Size: 100µg specific antibody in 200µl



Target Protein

Principal Names: DCX, doublecortin, RP5-914P14.1, DBCN, DC, FLJ51296, LISX, SCLH, XLIS, OTTHUMP00000216316, doublecortex, doublin, lis-X, lissencephalin-X, neuronal migration protein doublecortin

Official Symbol: DCX

Accession Number(s): NP_000546.2; NP_835365.1; NP_835364.1; NP_001182482.1

Human GenelD(s): 1641

Non-Human GenelD(s): 13193 (mouse), 84394 (rat)

Important Comments: This antibody is expected to recognize all four reported isoforms (NP_000546.2; NP_835365.1; NP_835364.1; NP_001182482.1). Reported variants represent identical protein: NP_835364.1 and NP_835366.1.

Immunogen

Peptide with sequence C-KTSANMKAPQS, from the internal region of the protein sequence according to NP_000546.2; NP_835365.1; NP_835364.1; NP_001182482.1.

Please note the peptide is available for sale.

Purification and Storage

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

Aliquot and store at -20°C. Minimize freezing and thawing.

Applications Tested

Peptide ELISA: antibody detection limit dilution 1:32000.

Western blot: Approx 45kDa band observed in Mouse fetal Brain lysates (calculated MW of 49.3kDa according to Mouse NP_001103692.1). Recommended concentration: 0.01-0.03µg/ml. Primary incubation 1 hour at room temperature.

IHC: In paraffin embedded Human Cerebellum shows axonal and incidental nuclear staining. Recommended concentration: 2-4µg/ml. This antibody has been successfully used in IHC on Rat: Heysieattalab, S et al. (2021) Acta Epileptologica 3, 3 (2021).

Immunofluorescence: Strong expression of the protein seen in the cytoplasm of HepG2 and KNRK cells. Recommended concentration: 5-10µg/ml.

Species Reactivity

Tested: Human, Mouse, Rat

Expected from sequence similarity: Human, Mouse, Rat, Dog, Pig, Cow

Specific Reference

This antibody has been successfully used in IHC on Rat:

Heysieattalab, S., Sadeghi

Dynamic structural neuroplasticity during and after epileptogenesis in a pilocarpine rat model of epilepsy

Acta Epileptologica 3, 3 (2021). https://doi.org/10.1186/s42494-020-00037-7 PMID: 0

EB10781 (0.01μg/ml) staining of Mouse fetal Brain lysate (35μg protein in RIPA buffer). Detected by chemiluminescence.

EB10781 (2µg/ml) staining of paraffin embedded Human Cerebellum. Microwaved antigen retrieval with citrate buffer pH 6, HRP-staining.

EB10781 Negative Control showing staining of paraffin embedded Human Cerebellum, with no primary antibody.

EB10781 Immunofluorescence analysis of paraformaldehyde fixed HepG2 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (5ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml).

EB10781 Immunofluorescence analysis of paraformaldehyde fixed KNRK cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).