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Rabbit Anti-Phospho-Doublecortin (Ser128) antibody

SL3113R

Product Name:	Phospho-Doublecortin (Ser128)
Chinese Name:	磷酸化双皮质素抗体
Alias:	Doublecortin (phospho S128); p-Doublecortin (phospho S128); DBCN; DBCN; Dbct; Dbct; DC; DC; DCX; DCX; DCX_HUMAN; Doublecortex; Doublecortex; Doublin; FLJ51296; Lis X; Lis X; Lis-X; Lissencephalin X; Lissencephalin X; Lissencephalin-X; Lissencephaly X linked; Lissencephaly X linked; Lissencephaly X linked doublecortin; Lissencephaly X linked doublecortin; LISX; LISX; Neuronal migration protein doublecortin; OTTHUMP00000023859; OTTHUMP00000023860; OTTHUMP00000216315; OTTHUMP00000216316; SCLH; SCLH; XLIS; XLIS.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Cow,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/TestIF=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:	40kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human Doublecortin around the phosphorylation site of Ser128:AL(p-S)NE
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:	This gene encodes a member of the doublecortin family. The protein encoded by this gene is a cytoplasmic protein and contains two doublecortin domains, which bind microtubules. In the developing cortex, cortical neurons must migrate over long distances to reach the site of their final differentiation. The encoded protein appears to direct neuronal migration by regulating the organization and stability of microtubules. In addition, the encoded protein interacts with LIS1, the regulatory gamma subunit of platelet activating factor acetylhydrolase, and this interaction is important to proper microtubule function in the developing cortex. Mutations in this gene cause abnormal migration of neurons during development and disrupt the layering of the cortex, leading to epilepsy, mental retardation, subcortical band heterotopia ("double cortex" syndrome) in females and lissencephaly ("smooth brain" syndrome) in males. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2010] **Function:** Microtubule-associated protein required for initial steps of neuronal dispersion and cortex lamination during cerebral cortex development. May act by competing with the putative neuronal protein kinase DCAMKL1 in binding to a target protein. May in that way participate in a signaling pathway that is crucial for neuronal interaction before and during migration, possibly as part of a calcium ion-dependent signal transduction pathway. May be part with LIS-1 of a overlapping, but distinct, signaling pathways that promote neuronal migration. **Subunit:** Interacts with tubulin. **Subcellular Location:** Cytoplasm. Cell projection. Note=Localizes at neurite tips. **Tissue Specificity:** Highly expressed in neuronal cells of fetal brain (in the majority of cells of the cortical plate, intermediate zone and ventricular zone), but not expressed in other fetal tissues. In the adult, highly expressed in the brain frontal lobe, but very low expression in other regions of brain, and not detected in heart, placenta, lung, liver, skeletal muscles, kidney and pancreas. **Post-translational modifications:** Phosphorylation by MARK1, MARK2 and PKA regulates its ability to bind mirotubules. **DISEASE:** Defects in DCX are the cause of lissencephaly X-linked type 1 (LISX1) [MIM:300067]; also called X-LIS or LIS. LISX1 is a classic lissencephaly characterized by mental

retardation and seizures that are more severe in male patients. Affected boys show an abnormally thick cortex with absent or severely reduced gyri. Clinical manifestations include feeding problems, abnormal muscular tone, seizures and severe to profound psychomotor retardation. Female patients display a less severe phenotype referred to as 'doublecortex'.
Defects in DCX are the cause of subcortical band heterotopia X-linked (SBHX) [MIM:300067]; also known as double cortex or subcortical laminar heterotopia (SCLH). SBHX is a mild brain malformation of the lissencephaly spectrum. It is characterized by bilateral and symmetric plates or bands of gray matter found in the central white matter between the cortex and cerebral ventricles, cerebral convolutions usually appearing normal.
Note=A chromosomal aberration involving DCX is found in lissencephaly. Translocation t(X;2)(q22.3;p25.1).

Similarity:
Contains 2 doublecortin domains.

SWISS:
O43602

Gene ID:
1641

Database links:

Entrez Gene: 1641Human

Entrez Gene: 13193Mouse

Entrez Gene: 84394Rat

Omim: 300121Human

SwissProt: O43602Human

SwissProt: O88809Mouse

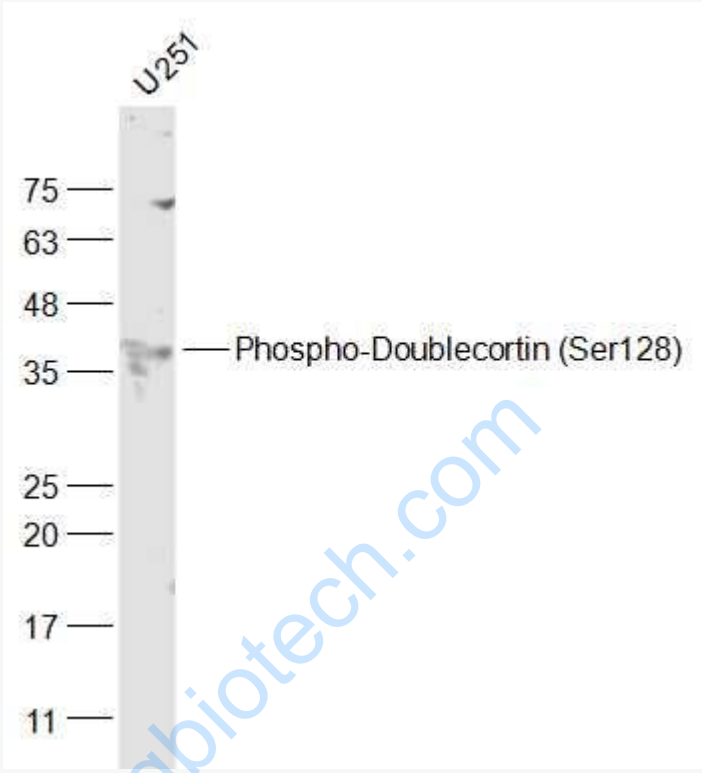
SwissProt: Q9ESI7Rat

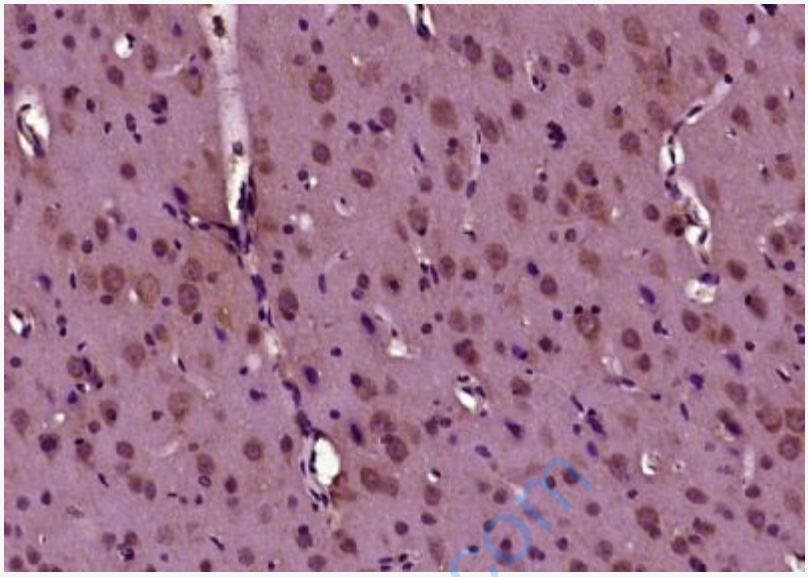
Unigene: 34780Human

Unigene: 12871Mouse

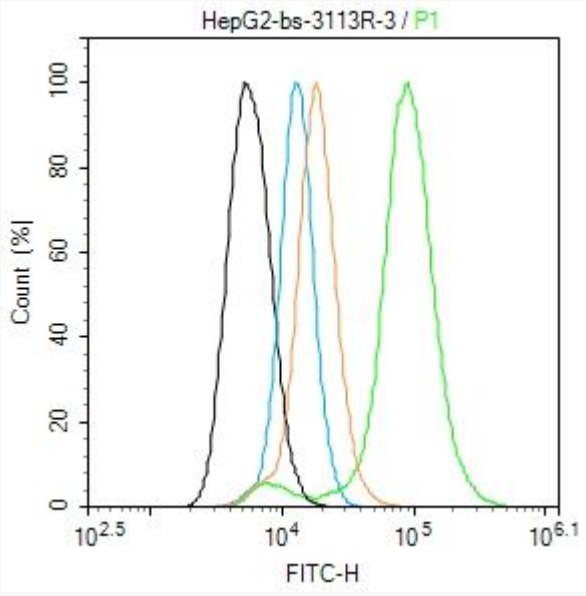
Unigene: 121471Rat

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

	Neuronal Marker (神经细胞Maker)
Picture:	 Sample: U251(Human) Cell Lysate at 30 ug Primary: Anti-Phospho-Doublecortin (Ser128) (SL3113R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 40 kD Observed band size: 40 kD



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 (Phospho-Doublecortin (Ser128)) Polyclonal Antibody, Unconjugated (SL3113R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



	Blank control (black line): HepG2(black) (The cells were fixed with 2% paraformaldehyde (10 min) , then permeabilized with PBST for 30 min on room temperature) Primary Antibody (green line): Rabbit Anti-Phospho-Doublecortin(Ser128)(SL3113R) ; Dilution: 1μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC;Dilution: 1μg /test.