

#### www.immunoway.com

# **Doublecortin (Phospho Ser339) Rabbit pAb**

CatalogNo: YP1091 Orthogonal Validated 💽

## Key Features

Host Species <ul> <li>Rabbit</li> </ul>	Reactivity • Human,Mouse,Rat,Pig	Applications • IHC,IF,ELISA
MW • 45kD (Calculated)	Isotype • IgG	

#### **Recommended Dilution Ratios**

IHC 1:100-1:300 ELISA 1:5000 IF 1:50-200

### **Storage**

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

### **Basic Information**

Clonality Polyclonal

### Immunogen Information

ImmunogenThe antiserum was produced against synthesized peptide derived from human<br/>Doublecortin around the phosphorylation site of Ser376. AA range:330-365

Specificity

Phospho-Doublecortin (S339) Polyclonal Antibody detects endogenous levels of Doublecortin protein only when phosphorylated at S339. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):PTsPG

# **Target Information**

**Protein Name** Neuronal migration protein doublecortin

DCX

Organism	Gene ID	UniProt ID
Human	<u>1641;</u>	<u>043602;</u>
Mouse	<u>13193;</u>	<u>088809;</u>
Rat		<u>Q9ESI7;</u>

#### Cellular Cytoplasm . Cell projection, neuron projection . Localizes at neurite tips. .

Localization

Gene name

**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.

Function

Alternative products: Isoform LIS-XA possesses an alternative exon in 5' and is then translated from an upstream initiation codon. Isoform LIS-XB, isoform LIS-XC and isoform LIS-XD translation starts at the downstream initiation codon, leading to the absence of the 81 first amino acids. Isoform LIS-XC and isoform LIS-XD differ from isoform LIS-XB by a five amino acids and a one amino acid-insertion respectively, Disease: A chromosomal aberration involving DCX is found in lissencephaly. Translocation t(X;2)(g22.3;p25.1).,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'., Disease: 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., Function: Seems to be 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 iondependent signal transduction pathway. May be part with LIS-1 of an overlapping, but distinct, signaling pathways that promote neuronal migration., similarity: Contains 2 doublecortin domains., subunit: Interacts with tubulin., 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.,



Validation Data

Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Doublecortin (Phospho-Ser376) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using Doublecortin (Phospho-Ser376) Antibody. The picture on the right is blocked with the phospho peptide.

# **Contact information**

Orders:	order@immunoway.com
Support:	tech@immunoway.com
Telephone:	877-594-3616 (Toll Free), 408-747-0185
Website:	http://www.immunoway.com
Address:	2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information: **Doublecortin** (Phospho Ser339) Rabbit pAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents