



Rat DCX blocking peptide (DAG-P1509)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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]
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 ex
Conjugate	Unconjugated
Applications	BL
Sequence Similarities	Contains 2 doublecortin domains.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	DCX doublecortin [Homo sapiens (human)]
Official Symbol	DCX
Synonyms	DCX; doublecortin; DC; DBCN; LISX; SCLH; XLIS; neuronal migration protein doublecortin; lis-X; doublin; doublecortex; lissencephalin-X;
Entrez Gene ID	1641
mRNA Refseq	NM_000555.3
Protein Refseq	NP_000546.2
UniProt ID	O43602
Chromosome Location	Xq22.3-q23
Pathway	Axon guidance, organism-specific biosystem; Developmental Biology, organism-specific biosystem; L1CAM interactions, organism-specific biosystem; Lissencephaly gene (LIS1) in neuronal migration and development, organism-specific biosystem; Neurofascin interactions, organism-specific biosystem;
Function	microtubule binding; protein kinase binding;