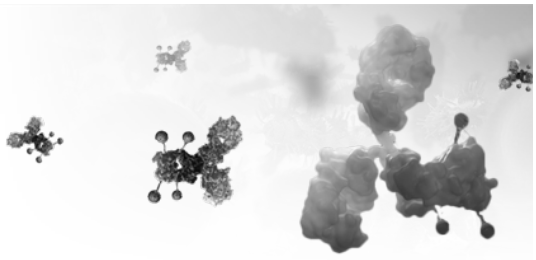

# Human DCX blocking peptide (DAG-P1510)

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 |
| **Purity** | 70 - 90% by HPLC. |
| **Conjugate** | Unconjugated |
| **Applications** | BL |
| **Sequence Similarities** | Contains 2 doublecortin domains. |
| **Format** | Liquid |
| **Buffer** | Information available upon request. |
| **Preservative** | None |
| **Storage** | Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request. |

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# 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; |

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