

**Doublecortin Antibody, pAb, Rabbit****Cat. No.:** A01303-100**Size:** 100 µg**Synonyms:** Rabbit Anti-Doublecortin pAb;**Description:**

Doublecortin (DCX) is a microtubule-associated protein expressed almost exclusively in immature neurons. It seems to be required for initial steps of neuronal dispersion and cortex lamination during cerebral cortex development. Doublecortin protein may act by competing with the putative neuronal protein kinase DCAMKL1 in binding to a target protein. As a cytoskeletal protein which affects neuronal migration by regulating the stability of microtubules, Doublecortin 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. Doublecortin is likely to work with LIS-1 in an overlapping, but distinct, signaling pathway that promotes neuronal migration.

GenScript **Doublecortin Antibody, pAb, Rabbit** is developed in Rabbit using a KLH-coupled synthetic peptide from within residues 230-280 of human Doublecortin protein (Swiss Prot: O43602).

**Immunogen:** KLH-coupled synthetic peptide from within residues 230-280 of human Doublecortin protein (Swiss Prot: O43602).

**Host:** Rabbit**Antigen Synonyms:** Human**Conjugation:** Unconjugated**Predicated Band Size:**

49 kD

**Observed Band Size:**

49 kD

**Example****Formulation:**

0.5 mg/ml, lyophilized with PBS, pH 7.4, containing 0.02% sodium azide

**Ig Subclass:** Rabbit IgG

**Specificity:** GenScript **Doublecortin Antibody, pAb, Rabbit** detects endogenous levels of human, mouse and rat Doublecortin protein.

**Purification:** Immunoaffinity chromatography**Applications:**

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

**ELISA:** 0.05-0.2 µg/ml**Western blot:** 0.5-1 µg/ml**Immunohistochemistry:** 5-10 µg/ml**Flow cytometry:** 1-3 µg for 1 x 10<sup>6</sup> cells**Other applications:** user-optimized

**Species Reactivity:** Human, mouse and rat. Reactivity to other species is not tested yet.

**Reconstitution:**

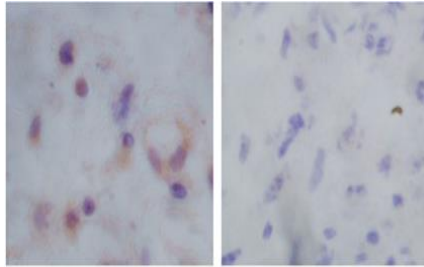
Reconstitute the lyophilized powder with deionized water (or equivalent) to an final concentration of 0.5 mg/ml.

**Storage:**

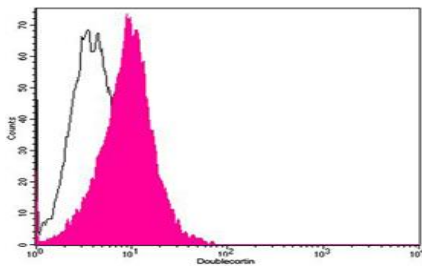
The antibody is stable in lyophilized form if stored at -20°C or below. The reconstituted antibody can be stored for 2-3 weeks at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.



Western blot analysis of tissue lysates using Doublecortin Antibody, pAb, Rabbit (GenScript, A01303, 1 µg/ml). The signal was developed with IRDye™ 800 Conjugated Goat Anti-Rabbit IgG. Predicted Size: 49 kD. Observed Size: 49 kD.



Immunohistochemistry analysis of human brain tissue slide (Paraffin embedded) using Rabbit Anti-Doublecortin Polyclonal Antibody (GenScript, A01303) and Purified Rabbit IgG (Whole molecule) Control (Right, GenScript, A01008).



Flow cytometric analysis of Ramos cells using Doublecortin Antibody, pAb, Rabbit (GenScript, A01303; shaded histogram) or with an isotype control antibody (GenScript, A01008; open histogram), followed by R-PE conjugated anti-rabbit IgG.