

DATASHEET

Version: 2016-08-17

Neuron specific β -Tubulin III Antibody, pAb, Rabbit**Cat. No.:** A01627-40**Size:** 40 μ g**Synonyms:** Tubb3 Antibody, pAb, Rabbit; beta III Tubulin Antibody , pAb, Rabbit**Description:**

Neuron specific β -Tubulin III, also known as tubulin beta-4, belongs to the tubulin family. It is the major constituent of microtubules and forms dimers of alpha and beta chains. One mole of tubulin binds to two moles of GTP, one binding is an exchangeable site of the beta chain and the other is at a non exchangeable site of the alpha chain. Neuron specific β -Tubulin III is regarded as a neuron-specific marker. The expression of neuron specific β -Tubulin III has been implicated in signal neuronal commitment in primitive neuroepithelium. In addition, increased expression of neuron specific β -Tubulin III occurs during cancer formation which leads to the development of anti-tubulin drugs.

GenScript **Neuron Specific β -Tubulin III Antibody, pAb, Rabbit** is developed in rabbit using a KLH-coupled synthetic peptide from C-terminal of human neuron specific β -Tubulin III (Swiss Prot: Q13509). This antibody label neuronal cell bodies, dendrites, axons, and axonal terminations and is used identify newly committed neurons. In addition, it serves an excellent loading control when normalizing data specifically for neuronal expression.

Immunogen: KLH-coupled synthetic peptide from C-terminal of human neuron specific β -Tubulin III (Swiss Prot: Q13509)**Host:** Rabbit**Antigen Synonyms:** Human**Conjugation:** Unconjugated**Predicated Band Size:**

50 KD

Observed Band Size:**Example**

50 KD

Formulation:

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

Ig Subclass: Rabbit IgG**Specificity:** GenScript **Neuron Specific β -Tubulin III****Antibody, pAb, Rabbit** detects endogenous levels of human, mouse, and rat neuron specific β -Tubulin III and does not cross-react with other beta tubulin isotypes.**Positive Control:** Mouse brain, rat brain, SY-SH5H and U251.**Purification:** Immunoaffinity chromatography**Applications:**

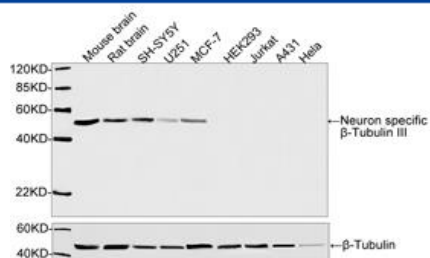
Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The 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.

Western blot: 0.5-1 μ g/ml**Other Applications:** user optimized**Species Reactivity:** Human, mouse, and rat**Reconstitution:**

Reconstitute the lyophilized powder with deionized water (or equivalent) to an antibody 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 $2-8^{\circ}\text{C}$. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.



Western blot analysis of cell and tissue lysates using Neuron Specific β -Tubulin III Antibody, pAb, Rabbit (GenScript, A01627, 1 μ g/ml)

The signal was developed with IRDye™ 800 Conjugated Goat Anti-Rabbit IgG.

Predicted Size: 50 KD

Observed Size: 50 KD