

Rev03
Update: Dec,14,2021

DATASHEET

Neuron specific β -Tubulin III Antibody, pAb, Rabbit

Cat. No.: A01627

Overview

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 isoforms. Positive Control: Mouse brain, rat brain, SY-SH5H and U251.
Host Species	Rabbit
Immunogen	KLH-coupled synthetic peptide from C-terminal of human neuron specific β -Tubulin III (Swiss Prot: Q13509)
Species Reactivity	Human, mouse, and rat
Conjugate	Unconjugated

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.

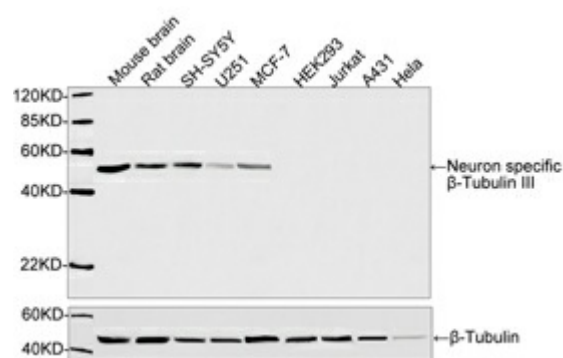
Application	Recommended Usage
Western Blot	0.5-1 μ g/ml
Other applications	User-optimized

Properties

Form	Lyophilized
Storage Buffer	lyophilized with PBS, pH 7.4, containing 0.02% sodium azide
Reconstitution	Reconstitute the lyophilized powder with deionized water (or equivalent) to an final concentration of 0.5 mg/mL.

Storage Instructions	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.
Purification	Affinity chromatography
Isotype	Rabbit IgG
Clonality	Polyclonal
Clone Id	Not applicable

Examples



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

Background

Target Background : 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.

Synonyms : Tubb3 Antibody, pAb, Rabbit; beta III Tubulin Antibody , pAb, Rabbit

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.