SONY

# Product Data Sheet

## Purified anti-Tubulin β 3 (TUBB3)

**Catalog # / Size:** 4606065 / 25 µl

**Clone:** TUJ1

**Isotype:** Mouse IgG2a

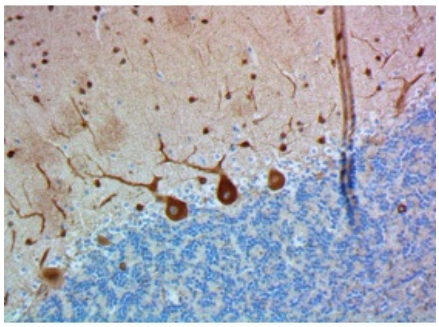
**Immunogen:** This antibody was raised against microtubules derived from rat brain.

**Reactivity:** Human,Mouse,Rat

**Preparation:** The antibody was purified by affinity chromatography.

**Formulation:** Phosphate-buffered solution + 0.03% Thimerosal.

**Concentration:** 1 mg/ml



IHC staining of purified anti-Tubulin ÃŽÂ² 3 (TUBB3) antibody (clone TUJ1) on formalin-fixed paraffin-embedded human brain tissue. Following antigen retrieval using Sodium Citrate H.I.E.R (Cat. No. 928602), the tissue was incubated with 1 Ã‚Âµg/ml of the

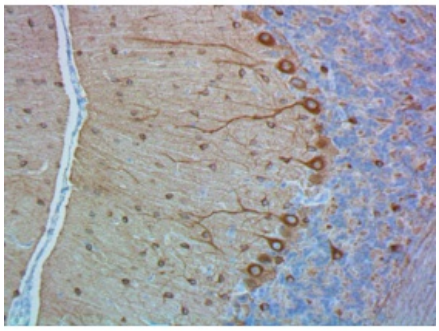
## Applications:

**Applications:** Flow Cytometry, Immunofluorescence, Immunohistochemstry, Other

**Recommended Usage:** Each lot of this antibody is quality control tested by formalin-fixed paraffin-embedded immunohistochemical staining. For immunohistochemistry, a concentration range of 1.0 – 5.0 µg/ml is suggested. For Western blotting, the suggested use of this reagent is 1.0 – 5.0 µg/ml. For immunocytochemistry, a concentration range of 1.0 – 5.0 µg/ml is recommended. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: flow cytometry[4], immunofluorescence microscopy[1-5,7], immunohistochemistry[5,7], and Western blotting[8].

This antibody is well characterized and highly reactive to neuron specific Class III β-tubulin (βIII). TUJ1 does not identify β-tubulin found in glial cells. TUJ1 recognizes an epitope located within the last 15 C-terminal residues[8].



IHC staining of purified anti-Tubulin ÃŽÂ² 3 (TUBB3) antibody (clone TUJ1) on formalin-fixed paraffin-embedded rat brain tissue. Following antigen retrieval using Sodium Citrate H.I.E.R (Cat. No. 928602), the tissue was incubated with 0.5 Ã‚Âµg/ml of the

**Application References:**

1. Zhao X, *et al.* 2017. Med Sci Monit. 22: 3915.
2. Lebok P, *et al.* 2016. Oncol Lett. 11(3):1987.
3. Du J, *et al.* 2015. BMC Cancer. 15:536.

**Description:** Tubulin is the main component of microtubules. In adults, tubulin beta 3 (TUBB3) is primarily expressed in neurons and is commonly used as a neuronal marker. It plays an important role in neuronal cell proliferation and differentiation. Mutations in this gene cause congenital fibrosis of the type 3 extraocular muscles. Tubulin beta 3 (TUBB3) is also found in a wide range of tumors. Studies indicate that it is a predictive and prognostic marker in various tumors.

**Antigen References:**

1. Zhao X, *et al.* 2017. Med Sci Monit. 22: 3915.
2. Lebok P, *et al.* 2016. Oncol Lett. 11(3):1987.
3. Du J, *et al.* 2015. BMC Cancer. 15:536.