

11-264-C100

## Monoclonal Antibody to betalll-tubulin Purified Antibody (0.1 mg)

Clone:	TU-20
lsotype:	Mouse IgG1
Specificity:	The antibody TU-20 recognizes C-terminal peptide sequence ESESQGPK (aa 441-448) of neuron-specific human betaIII-tubulin.
Regulatory Status:	RUO
Immunogen:	Peptide (C) 441-448 coupled to maleimide-activated keyhole limpet hemocyanin via cysteine added to the N-terminus of the neuron-specific peptide.
Species Reactivity:	Broad species reactivity
Application:	Flow Cytometry Western Blotting Recommended dilution:1-2 µg/ml, 90 min Positive control: Porcine brain lysate Negative control: HPB-ALL human peripheral blood leukemia cell line Sample preparation: Mix lysate with reducing Laemmli SDS-PAGE sample buffer. Application note: Reducing conditions. Immunohistochemistry (paraffin sections) Recommended dilution: 10 µg/ml Staining technique: Standard ABC technique (DAB+) Pretreatment: 0.1% pepsin (trypsin) in 0.1 M HCl; incubation 30 min in RT; or High temperature citrate buffer antigen retrieval Positive tissue: neuronal tissue Immunocytochemistry Positive material: Neuro2a mouse neuroblastoma cell line
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified by precipitation methods
Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability:	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
Expiration:	See vial label
Lot Number:	See vial label
Background:	The betalll-tubulin isoform is present dominantly in cells of neuronal origin and it is one of the earliest markers of neuronal differentiation. It is regarded as a specific probe for the cells of neuronal origin as well as for the tumours originating from these cells. The betalll-tubulin is most abundant in cells of neuronal origin, but was also detected in Sertoli cells of the testis and transiently in non-neuronal embryonic tissues.

For laboratory research only, not for drug, diagnostic or other use.

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz



Antiboures

References:

\*Draberova E, Lukas Z, Ivanyi D, Viklicky V, Draber P: Expression of class III beta-tubulin in normal and neoplastic human tissues. Histochem Cell Biol. 1998 Mar;109(3):231-9.

\*Peknicova J, Kubatova A, Sulimenko V, Draberova E, Viklicky V, Hozak P, Draber P: Differential subcellular distribution of tubulin epitopes in boar spermatozoa: recognition of class III beta-tubulin epitope in sperm tail. Biol Reprod. 2001 Sep;65(3):672-9.

\*Jirasek T, Pisarikova E, Viklicky V, Mandys V: Expression of class III beta-tubulin in malignant epithelial tumours: an immunohistochemical study using TU-20 and TuJ-1 antibodies. Folia Histochem Cytobiol. 2007;45(1):41-5.

\*Katsetos CD, Draberova E, Smejkalova B, Reddy G, Bertrand L, de Chadarévian J-P, Legido A, Nissanov J, Baas PW, Draber P: Class III β-Tubulin and γ-Tubulin are Co-expressed and form Complexes in Human Glioblastoma Cells. Neurochem Res (2007) 32:1387-1398.

\*Kukharskyy V, Sulimenko V, Macůrek L, Sulimenko T, Dráberová E, Dráber P: Complexes of gamma-tubulin with nonreceptor protein tyrosine kinases Src and Fyn in differentiating P19 embryonal carcinoma cells. Exp Cell Res. 2004 Aug 1;298(1):218-28.

\*Theodorou E, Dalembert G, Heffelfinger C, White E, Weissman S, Corcoran L, Snyder M: A high throughput embryonic stem cell screen identifies Oct-2 as a bifunctional regulator of neuronal differentiation. Genes Dev. 2009 Mar 1;23(5):575-88.

\*Jirásek T, Cipro S, Musilová A, Kubecová M, Mandys V: Expression of class III beta-tubulin in colorectal carcinomas: an immunohistochemical study using TU-20 & TuJ-1 antibody. Indian J Med Res. 2009 Jan;129(1):89-94.

\*Dráberová E, Šulimenko V, Vinopal S, Sulimenko T, Sládková V, D'Agostino L, Sobol M, Hozák P, Křen L, Katsetos CD, Dráber P: Differential expression of human γ-tubulin isotypes during neuronal development and oxidative stress points to a γ-tubulin-2 prosurvival function. FASEB J. 2017 May;31(5):1828-1846.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.

For laboratory research only, not for drug, diagnostic or other use.