

SM2202P**Monoclonal Antibody to alpha Tubulin / TUBA1B (Tyr-Tubulin) - Purified**

Alternate names:	Alpha-tubulin ubiquitous, Tubulin K-alpha-1, Tubulin alpha-1B chain, Tubulin alpha-ubiquitous chain
Quantity:	0.5 mg
Concentration:	1.0 mg/ml
Background:	Tubulin is the major building block of microtubules. This intracellular cylindrical filamentous structure is present in almost all eukaryotic cells. Microtubules function as structural and mobile elements in mitosis, intracellular transport, flagellar movement and in the cytoskeleton. Tubulin is a heterodimer which consists of alpha tubulin and beta tubulin.
Uniprot ID:	P68363
NCBI:	NP_006073
GeneID:	10376
Host / Isotype:	Rat / IgG2a
Recommended Isotype Controls:	SM15P, SM15PX
Clone:	YL1/2
Immunogen:	Yeast Tubulin. Spleen cells from immunised LOU rats were fused with cells of the Y3.Ag.1.2.3 rat myeloma cell line.
Format:	State: Liquid purified IgG fraction Purification: Affinity Chromatography on Protein G from tissue culture supernatant Buffer System: PBS Preservatives: 0.09% Sodium Azide
Applications:	ELISA: 1/100-1/1000 (This antibody is routinely tested in ELISA on Tubulin) (3). Immunoprecipitation. Radioimmunoassay. Immunofluorescence. Western blotting: Suitable for use as a Loading Control. Immunohistochemistry on Frozen Sections. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody SM2202P recognizes the alpha subunit of Tubulin, specifically binding tyrosylated Tubulin (Tyr-Tubulin) (2). The epitope recognized by this antibody has been extensively studied and would appear to be a linear sequence requiring an aromatic residue at the C terminus, with the two adjacent amino acids being negatively charged (represented by <i>Gly-Gly-Tyr</i> in Tyr-Tubulin). The antibody has been used in epitope tagging procedures to detect proteins tagged

with a C-terminal *Gly-Gly-Phe* epitope. These sequence requirements have been reported to result in some cross-reactivity with other proteins in certain circumstances, including *E. coli* rec A and oxidized Actin (5).

Species Reactivity:

Expected from sequence similarity: Birds, Echinoderm, Plants, Amphibia.

Storage:

Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

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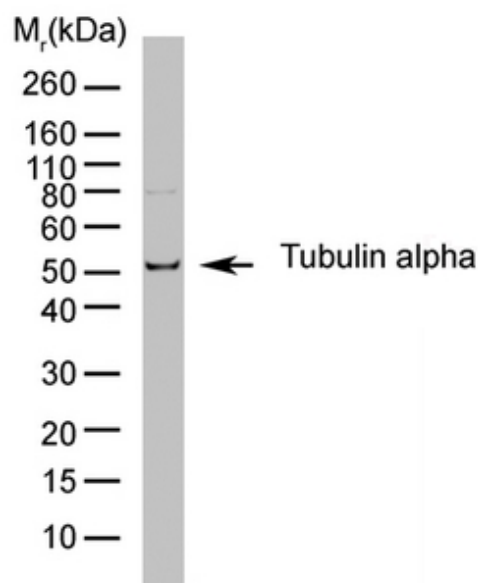
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Pictures:

HeLa whole cell lysate probed with Rat anti Tubulin Alpha antibody HRP conjugated.



Western blot analysis of C6 Rat glioma whole cell lysate probed with Rat anti Tubulin Alpha antibody (Cat.-No SM2202P) followed by HRP conjugated Goat anti Mouse IgG, visualized by chemiluminescence.

