

## Product Datasheet

### alpha-Tubulin Antibody (orb44529)

<b>Catalog Number</b>	orb44529
<b>Category</b>	Antibodies
<b>Description</b>	Mouse Monoclonal to alpha tubulin.
<b>Target</b>	alpha-Tubulin
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	Mouse IgG1
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Aves, Human, Invertebrate, Mouse, Paramecium, Plant, Porcine, Yeast
<b>Concentration</b>	1 mg/ml
<b>Buffer/Preservatives</b>	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
<b>Purification</b>	Purified by protein-A affinity chromatography.
<b>Immunogen</b>	Fraction of tubulin purified from porcine brain by two cycles of polymerization - depolymerization.
<b>UniProt ID</b>	<b>Q71U36</b>
<b>RRID</b>	AB_11021844
<b>Tested applications</b>	FC, ICC, IHC-P, IP, WB
<b>Application notes</b>	Flow cytometry: Recommended dilution: 1-4 µg/ml, intracellular staining. Western blotting: Recommended dilution: 1-2 µg/ml, reducing conditions.

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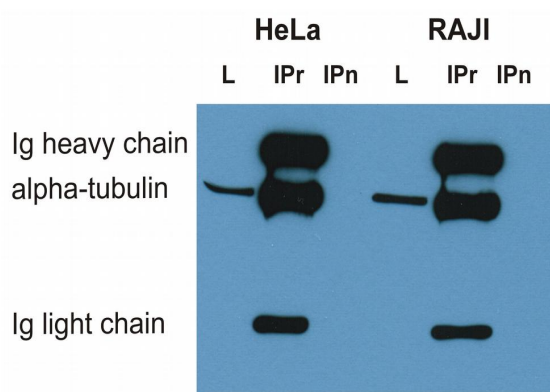
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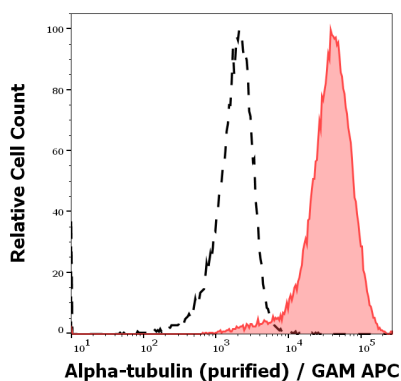
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<b>Specificity</b>	The antibody TU-01 recognizes a defined epitope (aa 65-97) on N-terminal structural domain of alpha-tubulin.
<b>Antibody Type</b>	Primary Antibody
<b>Clone Number</b>	TU-01
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Note</b>	For research use only
<b>Entrez</b>	<b>7277</b>
<b>Expiration Date</b>	12 months from date of receipt.



Immunoprecipitation of alpha-tubulin from HeLa and RAJI cell lysate by antibody TU-16 and its detection by antibody TU-01. IgM heavy chain (76-92 kDa) and IgM light chain (25-30 kDa) indicated. Mr of alpha tubulin is around 50 kDa. L = lysate; IPr = immunoprecipitate (reducing conditions); IPn = immunoprecipitate (non-reducing conditions).



Separation of HeLa cells stained using anti-alpha-Tubulin (TU-01) purified antibody (concentration in sample 3 µg/ml, GAM APC, red-filled) from HeLa cells unstained by primary antibody (GAM APC, black-dashed) in flow cytometry analysis (intracellular staining).

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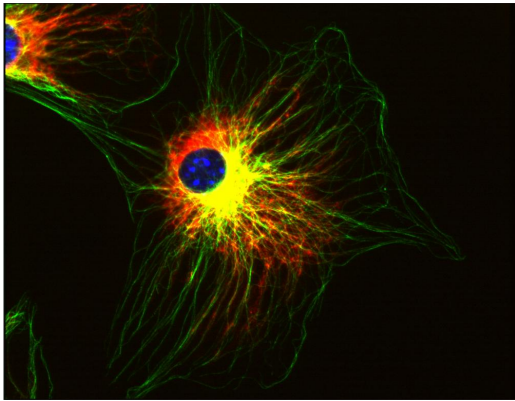
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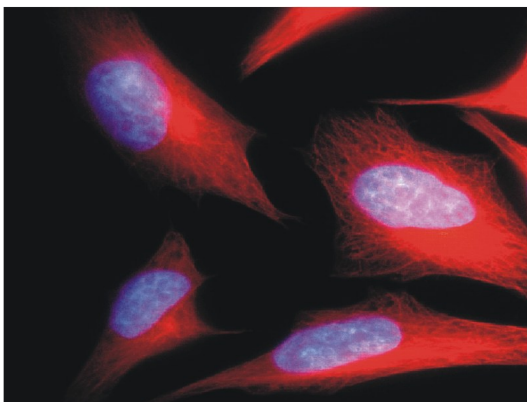
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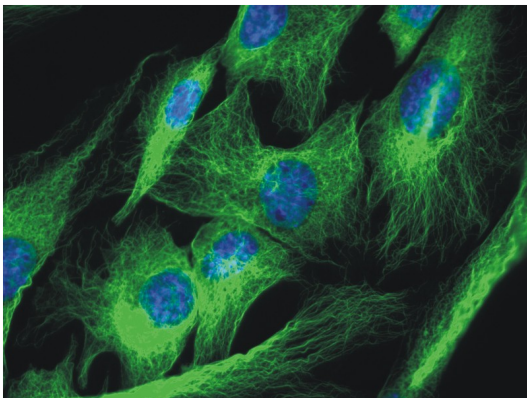
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Immunocytochemistry staining of 3T3 mouse embryonal fibroblast cell line using anti-alpha-tubulin (TU-01; green) and anti-Vimentin (VI-01; cat. no. orb44570; red). Nucleus is stained with DAPI (blue).



Immunocytochemistry staining of HeLa human cervix carcinoma cell line using anti-alpha-tubulin (TU-01; red). Nucleus is stained with DAPI (blue).



Immunocytochemistry staining of 3T3 mouse embryonal fibroblast cell line using anti-alpha-tubulin (TU-01; green). Nucleus is stained with DAPI (blue).

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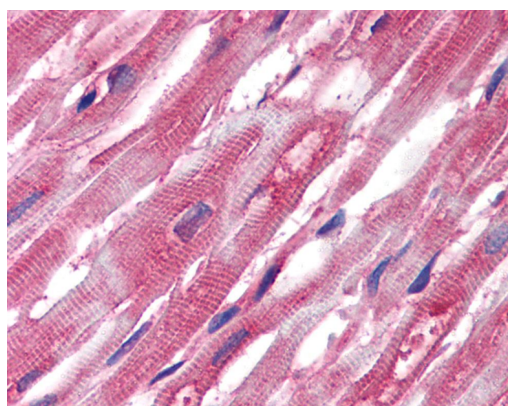
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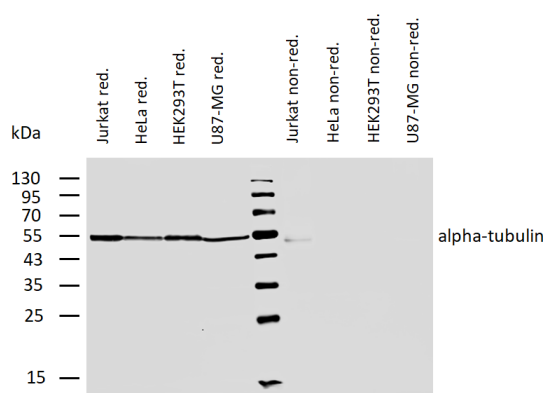
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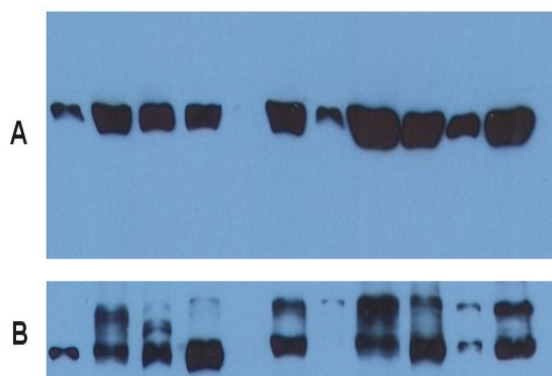
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Immunohistochemistry staining of human heart (paraffin sections) using anti-alpha-tubulin (TU-01).



Western blotting analysis of human alpha-tubulin using mouse monoclonal antibody TU-01 on lysates of various cell lines under reducing and non-reducing conditions. Nitrocellulose membrane was probed with 2 µg/ml of mouse anti-alpha-tubulin monoclonal antibody followed by IRDye800-conjugated anti-mouse secondary antibody. A specific band was detected for alpha-tubulin at approximately 54 kDa.



Use of anti-alpha-tubulin antibody TU-01 as a loading control (A) in an Western blotting experiment revealing the staining pattern of various cell lysates by a newly developed monoclonal antibody (B).

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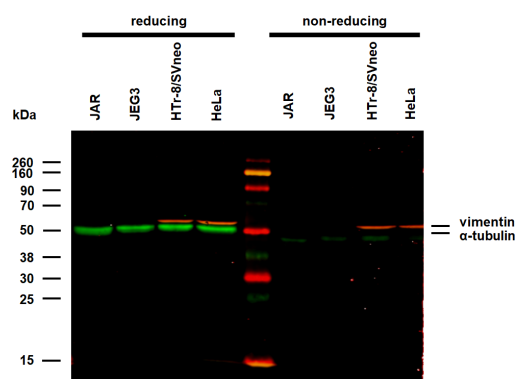
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Anti-alpha-Tubulin Purified (TU-01) works in WB application under reducing conditions. Western blotting analysis was performed on whole cell extracts (RIPA lysis buffer) of JAR, JEG3, HTR-8/SVneo, and HeLa cell lines mixed and heated (100°C, 5 min) with reducing (2-mercaptoethanol) or non-reducing SDS-loading buffer. Samples were resolved using 10% Tris-glycine SDS gel electrophoresis. Nitrocellulose membrane blot was probed simultaneously with mouse IgG1 monoclonal antibody TU-01 (1 µg/ml) and mouse IgM monoclonal antibody VI-01 detecting vimentin. Subclass-specific secondary antibodies IRDye 800CW Goat-anti-Mouse IgG (green) and IRDye 680RD Goat-anti-Mouse IgM (red) were used for multiplex fluorescent Western blot detection. Alpha-tubulin was detected at ~50 kDa and vimentin at ~55 kDa.

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