

Datasheet for 212-301-E55**Tubulin beta 3 Antibody****Overview**

Description:	Anti-Tubulin beta 3 (MOUSE) Antibody - 212-301-E55
Item No.:	212-301-E55
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Rat
Host Species:	Mouse

Product Details

Background:	Tubulin beta 3 Antibody detects Tubulin beta III protein. Tubulin is the major constituent of microtubules, existing as a heterodimer of the α and β subunits. The beta III isoform of tubulin is found almost exclusively in neuronal processes of adult tissues and is therefore an excellent marker for neurons. Neuron specific, posttranslational modifications within the C-terminal domain of beta III tubulin have been shown to be developmentally regulated suggesting that they may serve to modulate the interaction of tubulin with microtubule associated proteins. Additionally, beta III tubulin has been found to be highly expressed in cancer cells such as small cell lung cancer, large cell neuroendocrine carcinoma and adenocarcinomas and is correlated with an increasing histological degree of malignancy.
Synonyms:	mouse anti-Tubulin beta 3 Antibody, Neuron-specific class III beta-tubulin, Tubulin beta-3 chain, Tubulin beta-4 chain, Tubulin beta-III
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	AA10
Format:	IgG

Target Details

Gene Name:	Tubb3
Reactivity:	Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-Tubulin beta 3 Monoclonal Antibody was produced by repeated immunizations with a synthetic peptide corresponding to amino acid residues specific to beta III tubulin.
Purity/Specificity:	Anti-Tubulin beta 3 Antibody is directed against rat Tubulin beta III protein. The antibody was Protein G purified from cell culture supernatant. Cross reactivity with tubulin beta 3 from other species has not been determined.
Relevant Links:	• UniProtKB - Q4QRB4 • GeneID - 246118 • NCBI - AAM28438.1

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Tubulin beta 3 (Mouse) antibody is tested for use in Western Blotting and IHC. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 55 kDa in size corresponding to beta III tubulin proteins in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:1,000
WB:	1:10,000

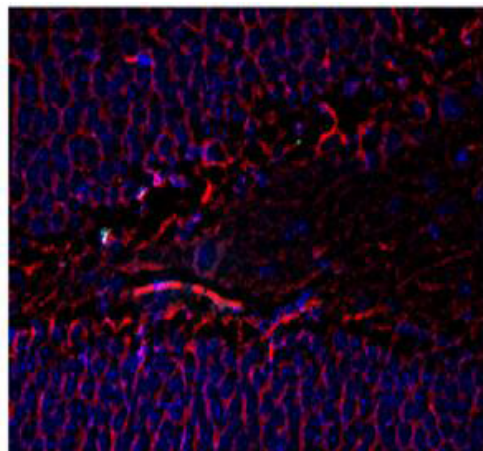
Formulation

Physical State:	Liquid
Concentration:	Titred value sufficient to run approximately 10 mini blots.
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

Shipping & Handling

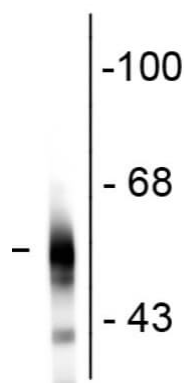
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry

Immunohistochemistry of Mouse Anti-Tubulin β III antibody.
 Tissue: mouse dentate gyrus. Fixation: formalin fixed
 paraffin embedded. Antigen retrieval: not required.
 Primary antibody: Anti-Tubulin β III antibody at 10 μ g/mL
 for 1 h at RT. Secondary antibody: Peroxidase mouse
 secondary antibody at 1:10,000 for 45 min at RT.
 Localization: Anti-Tubulin β III is cytoplasmic. Staining: Anti-
 Tubulin β III as precipitated red signal with DAPI blue nuclear
 counterstain.



Western Blot

Western Blot of Mouse Anti-Tubulin β III antibody. Lane 1:
 rat cortex lysate. Lane 2: none. Load: 10 μ g per lane.
 Primary antibody: Anti-Tubulin β III antibody at 1:400 for
 overnight at 4°C. Secondary antibody: IRDye800™ mouse
 secondary antibody at 1:10,000 for 45 min at RT. Block: 5%
 BLOTTO overnight at 4°C. Predicted/Observed size: ~55 kDa
 for Anti-Tubulin β III. Other band(s): Anti-Tubulin β III non-
 specific.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.