

Datasheet for 200-301-W55**GFAP Antibody****Overview**

Description:	Anti-GFAP (MOUSE) Monoclonal Antibody - 200-301-W55
Item No.:	200-301-W55
Size:	100 µg
Applications:	IHC, Multiplex, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details

Background:	The 50 kDa type III intermediate filament protein glial fibrillary acidic protein (GFAP) is a major structural component of astrocytes. GFAP associates with the calcium binding protein annexin II-p2 and S-100. Association with these proteins together with phosphorylation regulates GFAP polymerization. Astrocytes respond to brain injury by proliferation (astrogliosis), and one of the first events to occur during astrocyte proliferation is increased GFAP expression. Interestingly, antibodies to GFAP have been detected in individuals with dementia. Anti-GFAP is ideal for investigators involved in Neuroscience Research, including Alexander Disease, Oligodendroglioma, Cytoskeleton Remolding Neurofilaments and PIP3/AKT Signaling.
Synonyms:	Glial fibrillary acidic protein, Intermediate filament protein, Astrocyte, gfapl, DKFZp459C0729, MGC139638, FLJ45472, AI836096, GFAP antibody
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	S206A-8
Format:	IgG1

Target Details

Gene Name:	GFAP
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-GFAP Antibody was produced in mice by repeated immunizations with a synthetic peptide corresponding to amino acids 411-422 (KTVEMRDGEVIK) of human GFAP.
Purity/Specificity:	Anti-GFAP Antibody was purified from concentrated tissue culture supernate by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with rat and mouse based on 100% homology with the immunizing sequence. Cross-reactivity with GFAP-R416W and other GFAP mutant proteins can be expected.
Relevant Links:	• UniProtKB - P14136 • GeneID - 2670

Application Details

Tested Applications:	IHC, Multiplex, WB
Application Note:	Anti-GFAP Antibody is tested for use in Western blot, Immunohistochemistry-P, and Immunocytochemistry. Expect a band approximately ~50 kDa on specific lysates or tissues. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IF:	User Optimized
IHC:	User Optimized
WB:	1:1000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	1X PBS, pH 7.4
Preservative:	0.1% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

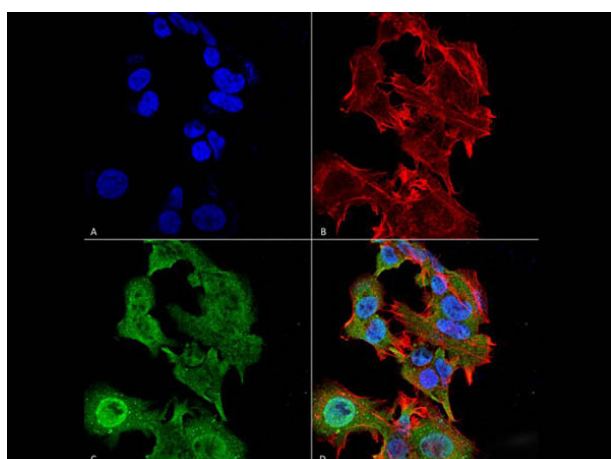
Shipping & Handling

Shipping Condition:	Wet Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

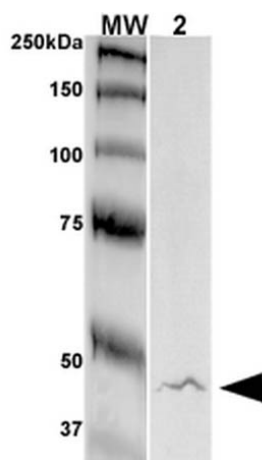
Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

Immunofluorescence of Mouse Anti-GFAP Monoclonal Antibody. Tissue: Neuroblastoma cell line SK-N-BE. Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-GFAP Monoclonal Antibody at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Cytoplasm. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) GFAP Antibody (D) Composite.



Western Blot

Western Blot of Mouse Anti-GFAP antibody. Lane 2: Rat Brain. Primary Antibody: Mouse Anti-GFAP Monoclonal Antibody at 1:250.

References

- Rodrigues-Amorim D et al. Plasma β -III tubulin, neurofilament light chain and glial fibrillary acidic protein are associated with neurodegeneration and progression in schizophrenia. *Sci Rep.* (2020)

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.