HRP anti-HNRNPA1 Antibody

Catalog# / Size	862503 / 25 µg 862504 / 100 µg
Clone	4B10/HNRNPA1
Regulatory Status	RUO
Other Names	Heterogeneous nuclear ribonucleoprotein A1, hnRNP A1, Helix-destabilizing protein, Single-strand RNA-binding protein, hnRNP core protein A1
Isotype	Mouse IgG2a, κ
Description	Heterogeneous nuclear ribonucleoprotein A1 (hnRNP A1) is a multi-purpose RNA binding protein involved in RNA metabolism and DNA genomic stability in normal and pathological conditions. hnRNP A1 is ubiquitously expressed and usually associates with nascent RNA polymerase II transcripts. hnRNP A1 is abundantly expressed in neuronal cells and reproductive tissue. Loss of hnRNP A1 has been observed in several neurodegenerative diseases, including Alzheimer's disease, multiple sclerosis, amytrophic lateral sclerosis. Structurally, hnRNPA1 has two RNA recognition motifs, which are post-translationally modified to alter its nuclear pore shuttling properties and RNA interaction.

Product Details

Verified Reactivity	Human, Mouse, Rat
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Partially purified HeLa HNRNPA1 protein
Formulation	This antibody is provided in 50% glycerol in aqueous buffered solutions with preservatives.
Preparation	The antibody was purified by affinity chromatography and conjugated with HRP under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	Upon receipt, the antibody solution should be stored undiluted at -20°C, and protected from prolonged exposure to light.
Application	WB - *Quality tested* IHC-P - *Verified*
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting. For Western blotting, the suggested use of this reagent is 0.5 - 1.0 µg per ml. For formalin-fixed paraffin-embedded immunohistochemical staining, a concentration range of 2 - 5 µg/ml is suggested. It is recommended that the reagent be titrated for optimal performance for each application.
RRID	AB_2810751 (BioLegend Cat. No. 862503) AB_2810752 (BioLegend Cat. No. 862504)

Antigen Details

Structure	hnRNPA1 has two isoforms. Human HNRPNA1 isoform A1-A is a 320 amino acid protein with a molecular mass of 34 kD, and isoform A1-B is a 372 amino acid protein with a molecular mass of 38 kD.
Distribution	Tissue Distribution: Ubiquitous expression Cellular Source: Nucleus and cytoplasm
Function	RNA metabolism, genomic stability

Interaction	Nascent RNA polymerase II transcripts
Cell Type	Neurons
Biology Area	Neurodegeneration, Neuroscience, Protein Synthesis
Antigen References	1. Bekenstein U, *et al*. 2013. *Mol Cell Neurosci*. 56:436-46. 2. Jean-Philippe J, *et al*. 2014. *Biochim Biophys Acta*. 1839(4): 251–258.
Gene ID	3178 15382 29578

Related Protocols

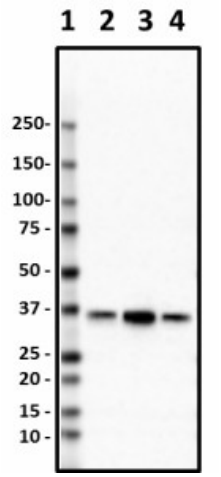
Western Blotting Protocol

Immunohistochemistry Protocol for Paraffin-Embedded Sections

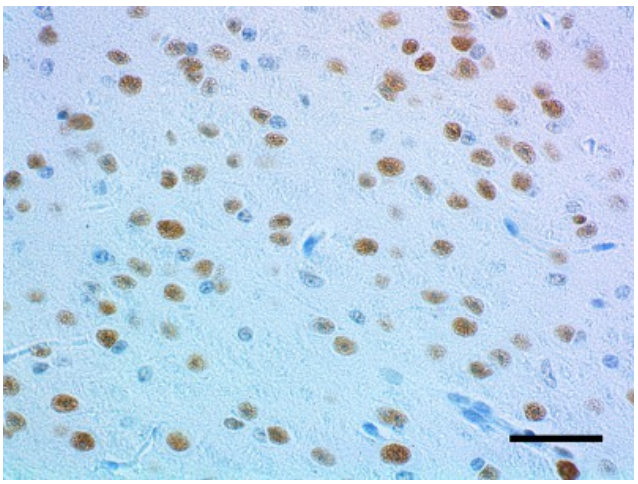
Other Formats

Purified anti-HNRNPA1, HRP anti-HNRNPA1, Biotin anti-HNRNPA1, Alexa Fluor® 488 anti-HNRNPA1, Alexa Fluor® 594 anti-HNRNPA1, Alexa Fluor® 647 anti-HNRNPA1

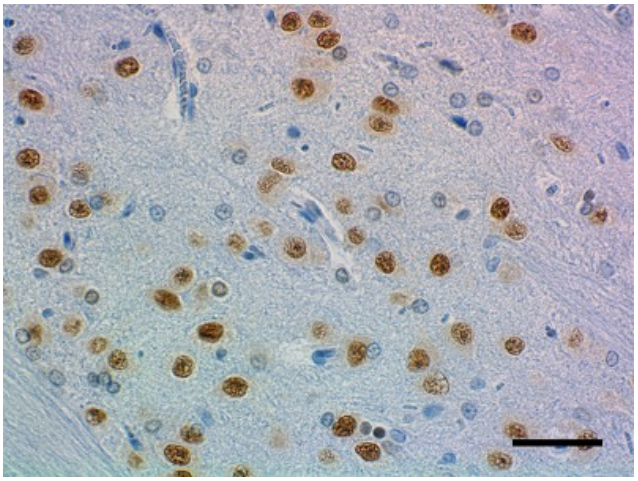
Product Data



Western blot of HRP anti-HNRNPA1 antibody (clone 4B10/HNRNPA1). Lane 1: Molecular weight marker; Lane 2: 20 µg of human brain lysate; Lane 3: 20 µg of mouse brain lysate; Lane 4: 20 µg of rat brain lysate. The blot was incubated with 0.5 µg/mL of the primary antibody overnight at 4°C. Enhanced chemiluminescence was used as the detection system.



IHC staining of HRP anti-HNRNPA1 antibody (clone 4B10/HNRNPA1) on formalin-fixed paraffin-embedded mouse brain tissue. Following antigen retrieval using Sodium Citrate H.I.E.R., the tissue was incubated with 2 µg/mL of the primary antibody overnight at 4°C. DAB was used for detection followed by hematoxylin counterstaining, according to the protocol provided. The image was captured with a 40X objective. Scale bar: 50 µm



IHC staining of HRP anti-HNRNPA1 antibody (clone 4B10/HNRNPA1) on formalin-fixed paraffin-embedded rat brain tissue. Following antigen retrieval using Sodium Citrate H.I.E.R., the tissue was incubated with 2 µg/mL of the primary antibody overnight at 4°C. DAB was used for detection followed by hematoxylin counterstaining, according to the protocol provided. The image was captured with a 40X objective. Scale bar: 50 µm

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587