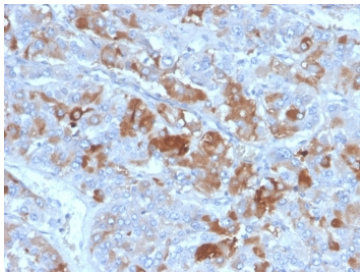
Apolipoprotein J Antibody / Neurodegeneration and Amyloid Marker [clone CLU/4731] (V9317)

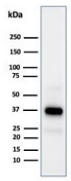
Catalog No.	Formulation	Size
V9317-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9317-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9317SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

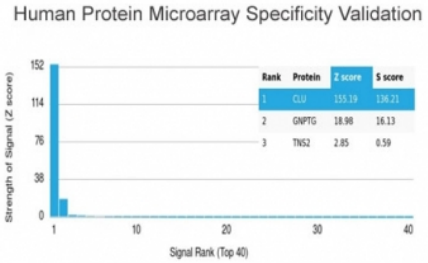
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	CLU/4731
Purity	Protein A/G affinity
UniProt	P10909
Localization	Nucleus, Cytoplasm
Applications	Western blot: 2-4ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This Apolipoprotein J Antibody / Neurodegeneration and Amyloid Marker is available for research use only.



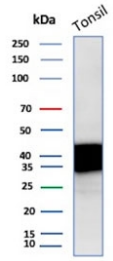
Apolipoprotein J Antibody Human Adrenal Gland IHC. Immunohistochemistry analysis of FFPE human adrenal gland tissue using Apolipoprotein J antibody. The mouse monoclonal antibody clone CLU/4731 demonstrates cytoplasmic staining in glandular cells, consistent with Clusterin / Apolipoprotein J expression as a neurodegeneration and amyloid marker. Signal is observed within adrenal cortical cell populations, reflecting the presence of this secreted chaperone protein in metabolically active tissue, while surrounding stromal elements show lower staining. HIER: boil tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling prior to staining.



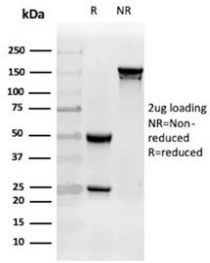
Apolipoprotein J Antibody Testis WB. Western blot analysis of human testis tissue lysate using Apolipoprotein J antibody. The mouse monoclonal antibody clone CLU/4731 detects bands at approximately 75-80 kDa and lower molecular weight bands around 34-39 kDa, consistent with the predicted molecular weight of full-length Clusterin / Apolipoprotein J and its processed alpha and beta subunits. This banding pattern reflects proteolytic cleavage and glycosylation of this secreted chaperone protein, supporting its relevance in protein aggregation and amyloid-associated biology in western blot analysis.



Apolipoprotein J Antibody Protein Microarray Specificity Validation. Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Apolipoprotein J antibody. The mouse monoclonal antibody clone CLU/4731 shows a strong and specific signal for Clusterin / Apolipoprotein J, with a high Z-score and clear separation from non-target proteins, supporting its specificity as a neurodegeneration and amyloid marker. The Z-score reflects signal intensity above background, while the S-score indicates the degree of separation from the next highest signal, confirming selective binding to the intended target.



Apolipoprotein J Antibody Tonsil WB. Western blot analysis of human tonsil tissue lysate using Apolipoprotein J antibody. The mouse monoclonal antibody clone CLU/4731 detects bands at approximately 75-80 kDa and lower molecular weight bands around 34-39 kDa, consistent with the predicted molecular weight of full-length Clusterin / Apolipoprotein J and its processed alpha and beta subunits. This banding pattern reflects proteolytic cleavage and glycosylation of this secreted chaperone protein, supporting its role in protein aggregation control and amyloid-associated biology in western blot analysis.



SDS-PAGE analysis of purified, BSA-free Apolipoprotein J antibody (clone CLU/4731) as confirmation of integrity and purity.

Description

Clusterin (CLU), also known as Apolipoprotein J, is a secreted glycoprotein that plays a key role in neurodegeneration, protein aggregation, and amyloid metabolism within the central nervous system. Apolipoprotein J antibody is widely used to study this proteinÃ¢Â€Â™s involvement in neurological disease processes, where it functions as an extracellular chaperone that regulates aggregation and clearance of misfolded proteins. Its activity is particularly relevant in the context of amyloid-beta deposition and neuroinflammatory signaling.

Apolipoprotein J Antibody / Neurodegeneration and Amyloid Marker, also referred to as Clusterin antibody, CLU antibody, or APO-J antibody in the literature, enables detection of this protein in pathways associated with neurodegeneration and proteostasis imbalance. Clusterin is frequently upregulated in response to neuronal stress, injury, and inflammation, where it binds aggregation-prone proteins and influences their solubility, transport, and clearance. This stress-associated upregulation distinguishes its role in disease from its baseline physiological function.

Functionally, Apolipoprotein J interacts with amyloid-beta peptides and other misfolded proteins, forming soluble complexes that reduce aggregation and cytotoxicity. It also participates in clearance pathways through interactions with extracellular receptors and transport systems, influencing deposition and removal of protein aggregates. Apolipoprotein J

antibody is therefore valuable for studying amyloid plaque dynamics, protein aggregation, and clearance mechanisms in neurodegenerative diseases such as AlzheimerÃ¢Â€Â™s disease.

Clusterin expression is elevated in diseased brain tissue and is often localized to regions of neuronal damage, inflammation, and protein accumulation. In addition to its chaperone activity, it modulates complement activation and immune signaling pathways, linking neurodegeneration with inflammatory responses. This dual role in proteostasis and immune modulation makes Apolipoprotein J a multifaceted marker of disease progression in neurological disorders.

Subcellularly, Apolipoprotein J is synthesized in the endoplasmic reticulum and secreted into the extracellular space, where it accumulates in the tissue microenvironment. Post-translational processing produces glycosylated and cleaved forms that may be detected as multiple bands in western blot analysis. In immunohistochemistry, staining is typically observed in cytoplasmic and extracellular regions, often associated with areas of protein aggregation or tissue remodeling.

This Apolipoprotein J antibody is supported by immunohistochemistry and western blot data demonstrating detection of Clusterin in relevant biological samples, along with protein microarray specificity validation confirming selective binding. Together, these features support its use in studies of neurodegeneration, amyloid biology, and inflammatory signaling in the central nervous system.

This antibody is part of a broader range of Clusterin antibody products supporting research into chaperone function, stress response, and disease biology.

Application Notes

Optimal dilution of the Apolipoprotein J Antibody / Neurodegeneration and Amyloid Marker should be determined by the researcher.

Immunogen

A portion of amino acids 150-300 was used as the immunogen for the Apolipoprotein J antibody.

Storage

Aliquot the Apolipoprotein J antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Clusterin antibody, CLU antibody, APO-J antibody, Apolipoprotein J protein antibody, Amyloid-associated clusterin antibody

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