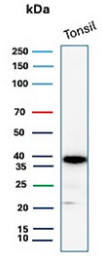
Apolipoprotein J Antibody / Immune Microenvironment Secreted Protein Marker [clone CLU/9192R] (V5461)

Catalog No.	Formulation	Size
V5461-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5461-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5461SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

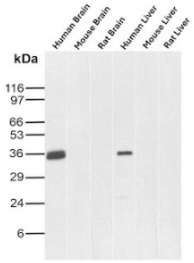
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	CLU/9192R
Purity	Protein A/G affinity
UniProt	P10909
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Apolipoprotein J Antibody / Immune Microenvironment Secreted Protein Marker is available for research use only.



Apolipoprotein J Antibody Tonsil WB. Western blot analysis of human tonsil tissue lysate using Apolipoprotein J antibody. The recombinant rabbit monoclonal antibody clone CLU/9192R detects a prominent band at approximately 36-39 kDa, consistent with the processed alpha and beta subunits of Clusterin / APO-J. This banding pattern reflects proteolytic cleavage and glycosylation of this secreted chaperone protein, with strong detection in tonsil aligning with its role in extracellular protein regulation within immune-rich tissue environments.



Apolipoprotein J Antibody Tissue WB. Western blot analysis of human brain, mouse brain, rat brain, human liver, mouse liver, and rat liver tissue lysates using Apolipoprotein J antibody. The recombinant rabbit monoclonal antibody clone CLU/9192R detects a band at approximately 36-39 kDa, consistent with the predicted molecular weight of the processed alpha and beta subunits of Clusterin / APO-J. Stronger signal in brain samples compared to liver aligns with the known enrichment of this secreted chaperone protein in neural and immune-associated tissue environments, while cross-species detection supports its conserved role in extracellular protein regulation.

Description

Clusterin (CLU), also known as Apolipoprotein J (APO-J), is a secreted glycoprotein that functions as an extracellular chaperone and plays an important role in shaping the local tissue microenvironment in immune-associated tissues. The Apolipoprotein J Antibody / Immune Microenvironment Secreted Protein Marker is designed to detect Clusterin in lymphoid and inflammatory contexts, where it is actively secreted and accumulates within extracellular spaces, contributing to protein stabilization and regulation of local signaling conditions.

APO-J antibody, also referred to as Clusterin antibody, CLU antibody, or Apolipoprotein J antibody in the literature, enables detection of this multifunctional protein in pathways associated with extracellular proteostasis, complement regulation, and tissue remodeling. Unlike intracellular chaperones, Clusterin is released into the extracellular matrix and interstitial space, where it binds misfolded or aggregation-prone proteins and maintains their solubility. This extracellular behavior is particularly evident in immune-rich tissues, where high cellular turnover and protein release create conditions that favor Clusterin accumulation.

Functionally, Clusterin interacts with components of the complement cascade and other immune-associated proteins, contributing to regulation of inflammatory responses and protection against excessive protein aggregation. Its broad binding capacity allows it to stabilize diverse extracellular substrates, linking protein quality control with immune microenvironment dynamics. Apolipoprotein J antibody is therefore valuable for studying the interface between extracellular protein homeostasis and immune-associated tissue processes, particularly in lymphoid organs such as tonsil.

Clusterin is expressed in epithelial and secretory tissues, but its distribution in lymphoid environments highlights its role in managing extracellular protein load under conditions of immune activation and tissue remodeling. In these tissues, immunohistochemistry often reveals cytoplasmic staining in producing cells together with diffuse extracellular deposition outlining interstitial regions, reflecting active secretion and accumulation within the tissue microenvironment.

Subcellularly, Clusterin is synthesized in the endoplasmic reticulum, glycosylated, and proteolytically processed into alpha and beta chains prior to secretion. These processed forms are commonly detected in western blot analysis as bands in the 34-39 kDa range, corresponding to cleaved subunits, while the full-length precursor may also be observed depending on processing state. This characteristic banding pattern provides insight into protein maturation and secretion dynamics in immune-associated tissues.

This Apolipoprotein J antibody is supported by western blot data demonstrating detection of processed Clusterin forms and by tissue staining consistent with extracellular accumulation in lymphoid environments. Together, these features support its use in studies of immune microenvironment biology, extracellular chaperone function, and regulation of protein stability in tissues undergoing active immune and inflammatory processes.

This Clusterin antibody complements a related Clusterin antibody used to study CLU, APO-J, and Apolipoprotein J biology.

Application Notes

Optimal dilution of the Apolipoprotein J Antibody / Immune Microenvironment Secreted Protein Marker should be

determined by the researcher.

Immunogen

A recombinant fragment (within amino acids 410-440) of human Clusterin protein was used as the immunogen for the recombinant Apolipoprotein J antibody.

Storage

Aliquot the recombinant 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, Secreted immune clusterin antibody