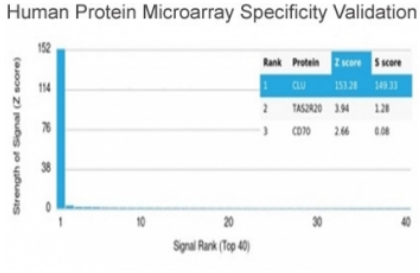
# Clusterin Antibody / Microarray Specificity Validated [clone CLU/4721] (V4005)

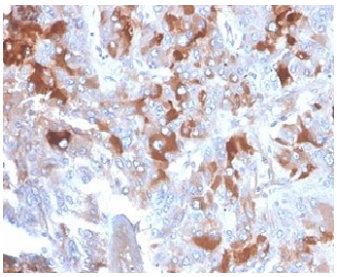
| Catalog No. | Formulation | Size |
|---|---|---|
| V4005-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 100 ug |
| V4005-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 20 ug |
| V4005SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |

**Bulk quote request**

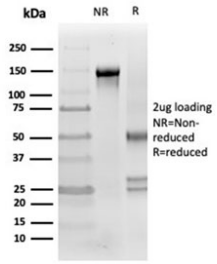
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Host** | Mouse |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgG2c, kappa |
| **Clone Name** | CLU/4721 |
| **Purity** | Protein A/G affinity |
| **UniProt** | P10909 |
| **Localization** | Nucleus, Cytoplasm |
| **Applications** | Immunohistochemistry (FFPE): 1-2ug/ml |
| **Limitations** | This Clusterin Antibody / Microarray Specificity Validated is available for research use only. |




Clusterin Antibody Microarray Specificity Validation. Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Clusterin antibody. The mouse monoclonal antibody clone CLU/4721 shows a strong and highly specific signal for Clusterin / CLU, with a high Z-score and clear separation from non-target proteins, confirming its specificity as a microarray specificity validated antibody. The Z-score reflects signal intensity above background, while the S-score represents the degree of separation from the next highest signal, demonstrating selective binding and minimal cross-reactivity in a proteome-wide context.



Clusterin Antibody Human Adrenal Gland Tissue IHC. Immunohistochemistry analysis of FFPE human adrenal gland tissue using Clusterin antibody. The mouse monoclonal antibody clone CLU/4721 demonstrates cytoplasmic staining in glandular cells, consistent with Clusterin / CLU expression and supported by microarray specificity validation. Signal is observed within adrenal cortical cell populations, reflecting localization 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.




SDS-PAGE analysis of purified, BSA-free Clusterin antibody (clone CLU/4721) as confirmation of integrity and purity.

## Description

Clusterin (CLU) is a secreted glycoprotein that functions as an extracellular chaperone involved in protein stabilization, lipid transport, and cellular stress response. Clusterin antibody is widely used to study this protein across complex biological systems, where accurate and highly specific detection is essential due to its abundance in extracellular fluids and its structural similarity to other glycosylated proteins. Reliable identification of Clusterin is particularly important in studies involving secreted protein networks and tissue microenvironments.

Clusterin Antibody / Microarray Specificity Validated, also known as microarray validated CLU antibody, APO-J antibody, or Apolipoprotein J antibody in the literature, enables detection of this multifunctional protein in pathways associated with extracellular proteostasis and immune modulation. Because Clusterin is secreted, extensively glycosylated, and processed into multiple molecular forms, experimental readouts such as western blot and immunohistochemistry can present complex patterns that require high-specificity reagents to interpret accurately.

Functionally, Clusterin binds misfolded or aggregation-prone proteins and maintains their solubility, facilitating extracellular clearance and preventing toxic deposition. It also associates with lipoprotein particles and interacts with complement pathway components, linking protein homeostasis with immune regulation. These overlapping roles increase the importance of using well-validated antibodies capable of distinguishing Clusterin from other extracellular or lipid-associated proteins present in biological samples.

This Clusterin Antibody is characterized by protein microarray specificity validation using high-density arrays containing more than 19,000 full-length human proteins. This approach demonstrates strong and selective binding to Clusterin / CLU, with high signal intensity and clear separation from non-target proteins, providing a robust measure of antibody specificity. The ability to confirm minimal cross-reactivity in a proteome-wide context is particularly valuable for studies involving complex lysates, secreted proteins, or biomarker discovery applications.

Subcellularly, Clusterin is synthesized in the endoplasmic reticulum, glycosylated, and secreted into the extracellular space, where it accumulates in tissue microenvironments and biological fluids. Post-translational processing generates heterodimeric and glycosylated forms that may appear as multiple bands in western blot analysis and as both cytoplasmic and extracellular staining in immunohistochemistry. Accurate detection of these forms depends on antibody specificity and consistency.

This Clusterin antibody is further supported by experimental data demonstrating detection in relevant biological samples, reinforcing its reliability across applications. Together, these validation approaches provide strong confidence in specificity and performance, making this antibody particularly well suited for studies requiring high target fidelity, including

comparative expression analysis, secreted protein profiling, and biomarker research.

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 Clusterin Antibody / Microarray Specificity Validated should be determined by the researcher.

## Immunogen

A portion of amino acids 150-300 from the human protein was used as the immunogen for the Clusterin antibody.

## Storage

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

## Alternate Names

Clusterin antibody, CLU antibody, APO-J antibody, Apolipoprotein J antibody, Clusterin validated antibody


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