## Human CellExp<sup>™</sup> ApoJ/Clusterin, human recombinant

CATALOG NO:	7459-10 7459-50	10 µg 50 µg
ALTERNATE NAMES:	TRPM-2, Apolipoprotein J, APO-J, CLI, CLU, SGP-2, AAG4, KUB1, SGP2, SP-40, TRPM2, MGC24903.	
SOURCE:	HEK 293 cells (Asp 23 – Arg 227)	
PURITY:	≥ 92% by SDS-PAGE gel	

**MOL. WEIGHT:** This protein is fused is fused with 6 xhis tag at the C terminus, and has a calculated MW of 50.9 kDa (Asp23-Glu449,  $\alpha$  chain 24.5kDa +  $\beta$  chain 27kDa). The recombinant rh CLUS / Clusterin (Asp23-Glu 449) was cleaved into  $\alpha$  chain and  $\beta$  chain, which form a heterodimer linked by disulfide bonds. DTT reduced protein migrates as 34-37kDa bands in SDS-PAGE due to glycosylation, corresponding to the cleaved  $\beta$  chain, and  $\alpha$  chain respectively.

ENDOTOXIN LEVEL:	<1 EU/µg by LAL method
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FORM:

Lyophilized

**FORMULATION:** Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

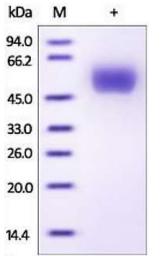
**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50  $\mu$ g/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

**DESCRIPTION**: Native Apolipoprotein J (ApoJ), also named Clusterin, is a heavily glycosylated, 75-80 kDa disulfide-linked heterodimeric protein. Despite being cloned since 1989, no genuine function has been attributed to ApoJ so far. The protein has been reportedly implicated in several diverse physiological processes such as sperm maturation, lipid transportation, complement inhibition, tissue remodeling, and membrane

recycling, cell-cell and cell-substratum interactions, stabilization of stressed proteins in a folding-competent state and promotion or inhibition of apoptosis. ApoJ gene is differentially regulated by cytokines, growth factors and stress-inducing agents. Clusterin is up- or down regulated on the mRNA or protein level in many pathological and clinically relevant situations including cancer, organ regeneration, infection, Alzheimer disease, retinitis pigmentosa, myocardial infarction, renal tubular damage, autoimmunity and others.

**BIOLOGICAL ACTIVITY:** Measured by its ability to induce clustering of human clear cell carcinoma epithelial cells Caki-2. Measured by its ability to inhibit DTT (Dithiothreitol) induced BSA precipitation.



Human recombinant ApoJ/Clusterin

## **RELATED PRODUCTS:**

- ApoJ / Clusterin, human recombinant (Cat. No. 7584-10, -50, -1000)
- ApoJ / Clusterin, mouse recombinant (Cat. No. 7554-10, -50)
- ApoJ / Clusterin, human plasma (Cat. No. 4325-10, -500)
- ApoJ / Clusterin Antibody (NT) (Cat. No. 6758-100)
- Apolipoprotein CI, Human Plasma (Cat. No. 4703-100)
- Apolipoprotein CII, Human Plasma (Cat. No. 4704-50)
- Apolipoprotein CIII, Human Plasma (Cat. No. 4706-100)

FOR RESEARCH USE ONLY! Not to be used in humans.

