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Product Information

Anti-Apolipoprotein J
produced in goat, affinity isolated antibody

Catalog Number **A2229**

Synonym: Anti-Clusterin

Product Description

Anti-Apolipoprotein J was produced in goat using as immunogen apolipoprotein Type J isolated from human plasma by density gradient centrifugation followed by HPLC purification. The antibody was affinity isolated on immobilized immunogen followed by extensive cross-adsorption against other apolipoproteins and human serum proteins to remove any unwanted specificities.

Anti-Apolipoprotein J recognizes human apolipoprotein J and has negligible cross-reactivity with Type A-I, A-II, B, C-I, C-II, C-III and E apolipoproteins. It has been successfully used in Western blot and was also assayed against apolipoprotein J in a standard sandwich ELISA.

Apolipoprotein J is a ubiquitously expressed secreted glycoprotein that is implicated in several physiological and disease processes from Alzheimer's disease to cancer. It appears to be involved in cell proliferation and differentiation, but its role in cell survival, cell death and neoplastic transformation remains debated.[1-3] In Alzheimer's disease, apolipoprotein J in conjunction with apolipoprotein E may have profound effects on the onset of amyloid-β deposition, as well as the local toxicity associated with amyloid-β deposits.[4] It is being considered as a possible cerebrospinal fluid marker for the disease.[5]

Reagent

Supplied as 500 μg of affinity isolated antibody in 0.1 M sodium borate, 0.075 M sodium chloride, 0.005 M EDTA, pH 8.0, and 0.01% sodium azide.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at 2-8 °C prior to opening. The product is stable as an undiluted liquid. Dilute only prior to immediate use. For extended storage, mix with an equal volume of glycerol, aliquot contents and freeze at –20 °C or below. Avoid repeated freezing and thawing. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

Immunoblotting: the recommended working dilution is 1:5,000 to 1:10,000

Immunohistochemistry on paraffin embedded tissue: dilute the product 1:50-1:200.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

1. Scaltriti, M., et al., Clusterin (SGP-2, ApoJ) expression is downregulated in low- and high-grade human prostate cancer, *Int. J Cancer*, **108** 23-30 (2004).
2. Thomas-Tikhonenko A., et al., Myc-transformed epithelial cells down-regulate clusterin, which inhibits their growth *in vitro* and carcinogenesis *in vivo*, *Cancer Res*., **64** 3126-3136 (2004).
3. Trougakos, I..P, et al., Silencing expression of the clusterin/apolipoprotein J gene in human cancer cells using small interfering RNA induces spontaneous apoptosis, reduced growth ability, and cell sensitization to genotoxic and oxidative stress, *Cancer Res*., **64** 1834-1842 (2004).
4. Holtzman, D.M., *In vivo* effects of ApoE and clusterin on amyloid-beta metabolism and neuropathology, J. Mol. Neurosci., **23**, 247-254. (2004).

5. Puchades, M., et al., Proteomic studies of potential cerebrospinal fluid protein markers for Alzheimer's disease, Brain Res. Mol Brain Res., **118**,140-146 (2003).