Mouse AGER / RAGE Protein (His Tag)

Catalog Number: **50489-M08H**

Sino Biological
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General Information

Gene Name Synonym:

RAGE

Protein Construction:

A DNA sequence encoding the extracellular domain of mouse AGER (NP_031451.2) extracellular domain (Met 1-Ala 342) was expressed, with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 96 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to bind mouse HMGB1-Fc in functional ELISA.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Gln 24

Molecular Mass:

The recombinant mouse AGER consists of 330 amino acids and has a predicted molecular mass of 35.3 kDa. In SDS-PAGE under reducing conditions, rm AGER migrates as an approximately 48 kDa band due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

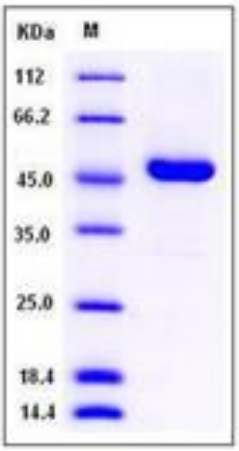
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Receptor for Advanced Glycosylation End Products (RAGE, or AGER) is a member of the immunoglobulin super-family transmembrane proteins, as a signal transduction receptor which binds advanced glycation endproducts, certain members of the S1/calgranulin family of proteins, high mobility group box 1 (HMGB1), advanced oxidation protein products, and amyloid (beta-sheet fibrils). Initial studies investigating the role of RAGE in renal dysfunction focused on diabetes, neurodegenerative disorders, and inflammatory responses. However, RAGE also has roles in the pathogenesis of renal disorders that are not associated with diabetes, such as obesity-related glomerulopathy, doxorubicin-induced nephropathy, hypertensive nephropathy, lupus nephritis, renal amyloidosis, and ischemic renal injuries. RAGE represents an important factor in innate immunity against pathogens, but it also interacts with endogenous ligands, resulting in chronic inflammation. RAGE signaling has been implicated in multiple human illnesses, including atherosclerosis, arthritis, Alzheimer's disease, atherosclerosis and aging associated diseases.

References

1.Zhou Z, et al. (2011) RAGE and its ligands in bone metabolism. Front Biosci (Schol Ed). 3: 768-76.
2.Mosquera JA. (2010) Role of the receptor for advanced glycation end products (RAGE) in inflammation]. Invest Clin. 51(2): 257-68.
3.D'Agati V, et al. (2010) RAGE and the pathogenesis of chronic kidney disease. Nat Rev Nephrol. 6(6): 352-60.