

PRODUCT INFORMATION



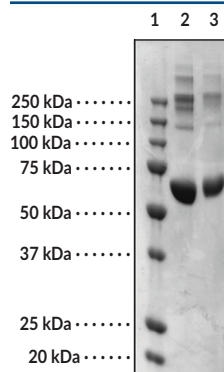
AGE-BSA (Carboxymethyl modified)

Item No. 22972

Overview and Properties

Synonyms: N^ε-(1-Carboxymethyl)-L-lysine-Bovine Serum Albumin, N^ε-(1-Carboxymethyl)-L-lysine-BSA
Source: Albumin isolated from bovine plasma and modified by carboxymethylation
Molecular Weight: 69.3 kDa
Storage: -20°C (as supplied); avoid freeze/thaw cycles by aliquoting the protein after resuspension
Stability: ≥2 years
Supplied in: Lyophilized from a solution in PBS, pH 7.4, 200 µg per vial. Reconstitution with 0.2 ml of water will yield 1 mg/ml solution in 1X PBS.

Image



Lane 1: MW Markers
Lane 2: BSA (5 µg)
Lane 3: AGE-BSA (Carboxymethyl modified) (5µg)

Description

Advanced glycation end products (AGEs) are formed from the nonenzymatic reaction of amino groups with reducing sugars.¹⁻³ AGEs have been implicated in diseases, such as diabetes mellitus, non-diabetic nephropathy, macrovascular disease, Alzheimer's disease, cataract, and ageing.¹⁻³ AGE receptors, such as the receptor for AGE (RAGE), mediate biological responses to AGEs, including endocytic uptake and degradation and induction of cytokines and growth factors.¹⁻³ AGE-BSA (Carboxymethyl modified) was produced by incubating BSA with glyoxylic acid and sodium cyanoborohydride.

References

1. Singh, R., Barden, A., Mori, T., *et al.* Advanced glycation end-products: A review. *Diabetologia* **44**(2), 129-46 (2001).
2. Giacco, F. and Brownlee, M. Oxidative stress and diabetic complications. *Circ. Res.* **107**(9), 1058-1070 (2010).
3. Vistoli, G., De Maddis, D., Cipak, A., *et al.* Advanced glycoxidation and lipoxidation end products (AGEs and ALEs): An overview of their mechanisms of formation. *Free Radic. Res.* **47**(Suppl 1), 3-27 (2013).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM