

# PRODUCT INFORMATION



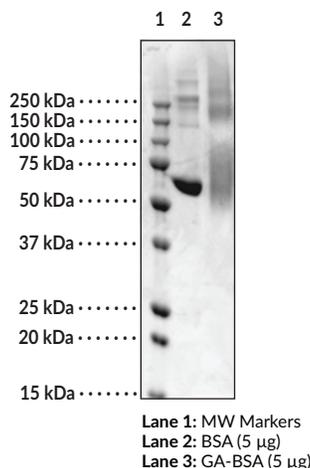
## GA-BSA

Item No. 22969

### Overview and Properties

**Synonyms:** AGE-BSA, Glycolaldehyde-Bovine Serum Albumin, Glycolaldehyde-BSA  
**Source:** Albumin isolated from bovine plasma and modified with glycolaldehyde  
**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, at 10 mg per vial. Reconstitution with 2 ml of 1X PBS will yield a 5 mg/ml solution

### Image



### Description

Advanced glycation end products (AGEs) are formed from the nonenzymatic reaction of amino groups with reducing sugars.<sup>1-3</sup> AGEs have been implicated in diseases, such as diabetes mellitus, non-diabetic nephropathy, macrovascular disease, Alzheimer's disease, cataract, and ageing.<sup>1-3</sup> 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.<sup>1-3</sup> GA-BSA was produced by incubating BSA with glycolaldehyde, followed by extensive dialysis.

### 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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