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Advanced Glycation End-Products AGEs-BSA

The products of the nonenzymatic glycation and oxidation of proteins, lipids and nucleic acids, the advanced glycation end-products (AGEs), accumulate in various pathological conditions, such as diabetes, inflammation, renal failure, and aging. AGEs accumulate at site of microvascular injury in diabetes, including the kidney, the retina, and within the vasculature. The enhanced formation of AGEs also exists in various disease, such as atherosclerosis, Alzheimer's disease, end-stage renal disease (ESRD), rheumatoid arthritis and liver cirrhosis.

AGEs can arise not only from glucose, but also from dicarbonyl compounds, short chain-reducing sugars and other metabolic pathways of glucose. This was prepared from D-glucose and BSA.

Package Size 1 mg (1 mL/vial) Format AGEs-BSA 1 mg/mL

Buffer PBS

Storage Store below - 20 °C.

Once thawed, store at 4 °C. Repeated freeze-thaw cycles should be avoided.

Production method BSA was incubated under sterile conditions with D-glucose and 5 mM DTPA in 0.2 M

phosphate buffer (pH7.4) at 37 °C for 8 weeks. Low weight molecular reactants and D-glucose were removed using a PD-10 column and dialysis against PBS (pH7.4).

[Reference]

- Takeuchi M, Makita Z, Bucala R, Suzuki T, Koike T, Kameda Y Immunological evidence that non-carboxymethyllysine advanced glycation end-products are produced from short chain sugars and dicarbonyl compounds in vivo. *Mol Med.* 2000 Feb;6(2):114-25.
- Takeuchi M, Yanase Y, Matsuura N, Yamagishi Si S, Kameda Y, Bucala R, Makita Z.
 Immunological detection of a novel advanced glycation end-product. *Mol Med.* 2001 Nov;7(11):783-91.

Manufacturer



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