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## Certificate of Analysis

**Mouse, Anti-AGE (Advanced Glycation End Products), Monoclonal Antibody**

**ImmunO™**

**Catalog #:** 63706  
**Lot #:** M2020

**Form:** Liquid. This liquid contains a stabilizer and 0.1% Proclin as a preservative.

**Preparation:** This monoclonal antibody is derived from mouse. Splenic lymphocytes from BALB/c mice, immunized with AGEs-BSA, were fused to myeloma P3U1 cells. The cell line (6D12) was grown in the ascitic fluid of BALB/c mice. The resulting antibody was then purified by Protein G affinity chromatography.

**Clone:** 6D12

**Isotype:** IgG1

**Concentration:** 0.25 mg/ml

**Specificity:** This antibody reacts with AGE (advanced stage of the Maillard reaction), AGE-proteins (AGE-BSA, AGE-HSA, AGE-Hb, AGE-Collagen), Age-poly-Lys, Age-Lys derivatives (AGE-a-Tos-Lys, -a-Tos-Lys-o-Me), and AGE-monoamino carboxylic acids (AGE-b-alanine, AGE-g-aminobutyric acid, AGE-e-aminocaproic acid). This indicates immunospecificity to a common structure among AGE-structures.

The antibody is negative to the early stage of the Maillard reaction (Schiff base adducts and Amadori rearrangement products), unmodified protein (BSA, HSA, Hb, Collagen), unmodified poly-Lys, unmodified Lys Derivatives (a-Tos-LYS, a-Tos-Lys-o-Me), unmodified monoamino carboxylic acids (b-alanine, g-aminobutyric acid, e-aminocaproic acid), and FFI, Pyrrole aldehyde, Pentosidine.

**Application:** This anti-AGE antibody can be used for immunohistochemical identification and biochemical quantitation of AGE-proteins.

**Dilution:** 2 mg/ml for Immunohistochemistry; frozen sections only  
0.1 - 0.5 mg/ml for ELISA  
0.25 - 5 mg/ml for Western Blot

It is recommended that the individual lab obtain their own optimal working dilution for their assay.

**Storage:** Store at -20°C. After initial thaw, store at +2-8°C. Avoid freeze/thaw cycles.

### General

**Information:** Reaction of protein amino groups with glucose leads, through the early products such as Schiff base and Amadori rearrangement products, to the formation of advanced glycation end products (AGE) which are characterized by fluorescence, brown color and inter- and intra-molecular cross-linking.

Recent immunological studies using anti-AGE antibodies demonstrated the presence of AGE in human lens (non-diabetic and non-cataractous), renal proximal tubules in patients with diabetic nephropathy and chronic renal failure, atherosclerotic lesions of arterial walls, b-2 microglobulin forming amyloid fibril deposits in patients with hemodialysis-related amyloidosis and brain tissues of patients with Alzheimer's disease. These results suggested the potential role of AGE in normal aging and age-enhanced disease processes.

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