

For research use only

Anti-CEL monoclonal antibody (mouse IgG1) [clone name: CEL-SP]

Nonenzymatic glycation reaction (Glycation) is one of post-translational modification/denaturation mechanisms of proteins by carbonyl compounds. The late products, AGEs (Advanced glycation end products), are thought to be closely related to medical condition such as diabetic complications. AGEs in tissues increase with diabetes and other life-style related diseases, and also with the progression of disease with inflammation and oxidative stress.

N^ε-(carboxyethyl)lysine (CEL) is one of the major AGEs as well as a similar compound N^ε-(carboxymethyl)lysine (CML). However, the synthetic pathway is different. CEL is synthesized by the reaction between lysyl residues and methylglyoxal which is a by-product of polyol metabolic pathway and glycolysis (Fig. 1) (1). Since methylglyoxal is produced within the cell, CEL is a typical AGE produced in cells.

This antibody (CEL-SP) (2) is a monoclonal antibody that shows strong reactivity to CEL. (Figure 2)

Volume	50 µg [125 µL/vial]
Packing	Mouse monoclonal antibody, 0.4 mg/mL, Frozen.
Buffer	PBS containing 0.1% ProClin as antiseptic
Storage	below -20°C. After thawing, store at 4°C, and use within 6 months. Avoid repeated freeze-thaw cycles.
Clone name	CEL-SP
Subclass	IgG1
Production method	Mouse spleen cells immunized with CEL-modified bovine serum albumin were fused with myelomas. Hybridomas were grown in the mouse abdominal cavity. IgG is purified from the ascitic fluid with a Protein G affinity column.
Recommended concentration	ELISA: 0.1 -1µg/mL, Tissue staining: 10 µg/mL

Note

1. This product is for research use only. Don't use for diagnostic purposes and for human body.
2. If the reagent accidentally gets into the eyes, mouth, wound, etc., rinse thoroughly with water. If necessary, consult a physician.
3. Store with a lid as instructed.
4. Dispose the used containers according to the regulations on waste.

Figure 1:
CEL generation path

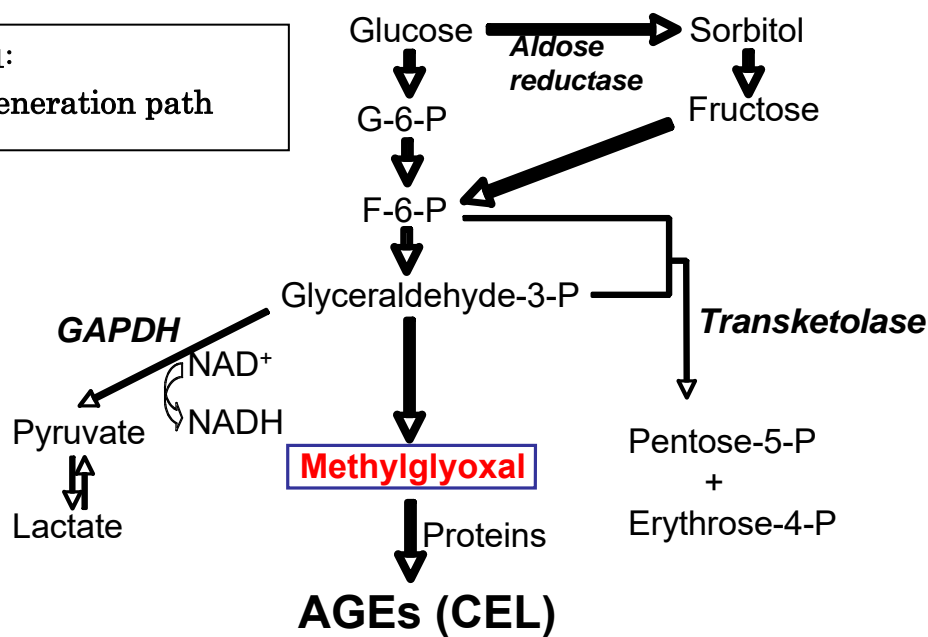
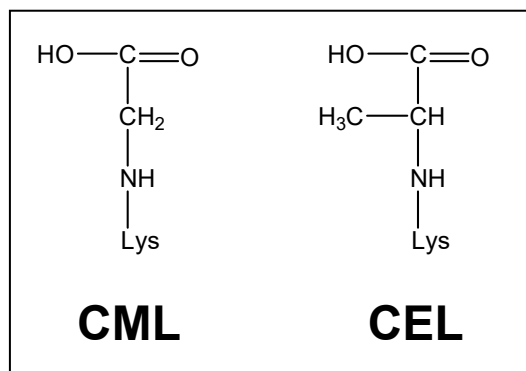
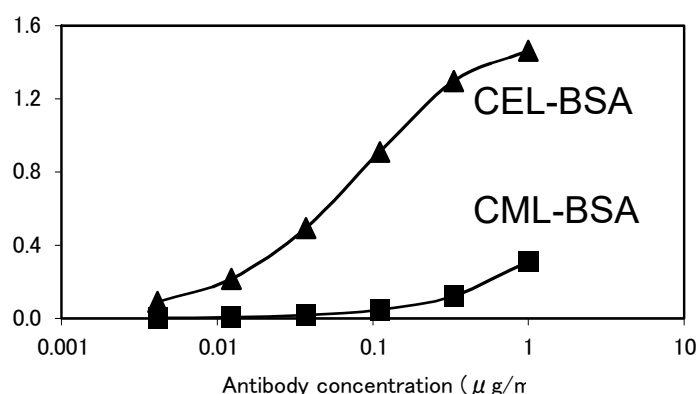


Figure 2: Reactivity of this antibody



[References]

1. Hammes H et al. *Nat Med* **9**, 294-299 (2003)
2. Nagai R et al. *J Immunol Methods* **332**, 112-120 (2008)



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