

Carboxymethyl Lysine Antibody

Monoclonal Mouse IgG_{2B} Clone # 318003 Catalog Number: MAB3247

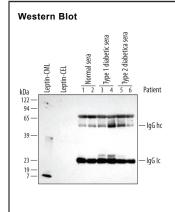
DESCRIPTION		
Specificity	Detects Carboxymethyl Lysine adducts on proteins in Western blots. In Western blots, no cross-reactivity with carboxyethyl lysine adducts is observed.	
Source	Monoclonal Mouse IgG _{2B} Clone # 318003	
Purification	Protein A or G purified from hybridoma culture supernatant	
Immunogen	Carboxymethyl Lysine-modified Keyhole Limpet Hemocyanin (KLH)	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below

DATA



Detection of CML-adducted Protein by Western Blot. Western blot shows 100-fold diluted samples of sera from control, Type 1 diabetic, and Type 2 diabetic volunteers. PVDF membrane was probed with 1 µg/mL Carboxymethyl Lysine Monoclonal Antibody (Catalog # MAB3247) followed by HRPconjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). Greater band intensity for the IgG heavy chain (IgG hc) suggests increased glycation in diabetic sera. For additional reference, carboxymethyl lysineadducted (CML) Leptin and carboxyethyl lysineadducted (CEL) Leptin were included. A specific band for CML-adducted Leptin was detected (as indicated). This experiment was conducted under reducing conditions using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.5 mg/mL in sterile PBS

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Nɛ-carboxymethyl lysine (CML) is formed by the non-enzymatic Schiff-base reaction of glucose with proteins, followed by an Amadori rearrangement and oxidation that leaves only a carboxymethyl group attached to the lysine. The levels of CML adducts accumulate over time and have been used as an indicator of both serum glucose levels and oxidative protein damage. Elevated serum CML-modified proteins have been associated with diabetes and may contribute to diabetic retinopathy, nephropathy and angiopathy.

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