

Rabbit Anti-CML (pan Nε-Carboxymethyl Lysine) Polyclonal: RC0326-0.1ML

Intended Use: For Research Use Only

Description: Nε (N epsilon)- or N6-Carboxymethyl Lysine (CML), is an advanced glycation end-product (AGE). CML has been the most used marker for AGEs in food analysis. CML-RAGE (Receptor for AGE) interaction triggers processes intimately linked to accelerated vascular and inflammatory complications that typify disorders in which inflammation is an established component. Recent studies show that gut microbiota mediates an aging-associated decline in gut barrier function, allowing AGEs to leak into the bloodstream from the gut and impairing microglial function in the brain. It is suggested that the amount of CML in human blood samples may correlated with age. A humanized monoclonal antibody which binds to Nε-Carboxymethyl Lysine shows considerable promise as a possible therapeutic agent for treating pancreatic cancer. The antibody recognizes proteins or peptides with carboxymethylated lysine residues. No cross reaction with acetylated or methylated proteins/peptides.

Specifications

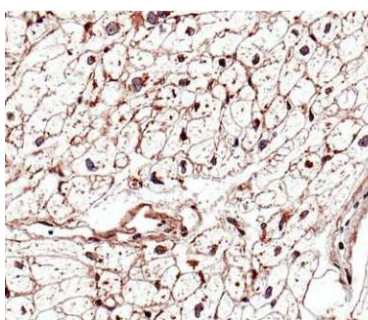
Clone: Polyclonal
 Source: Rabbit
 Isotype: IgG
 Reactivity: All
 Immunogen: Carboxymethylated KLH conjugates
 Localization: Membrane, cytoplasm, extracellular matrix
 Formulation: Purified antibody in PBS pH7.4, containing BSA, and ≤ 0.09% sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC, ELISA, IF, WB
 Package:

Description	Catalog No.	Size
CML Polyclonal Concentrated	RC0326-0.1ML	0.1 ml

IHC Procedure*:

Positive Control: Ileum, salivary glands, heart
 Concentrated Dilution: User determined
 Pretreatment: Citrate pH6.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
 Incubation Time and Temp: Overnight @ 4°C
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human left ventricular biopsies stained with anti-CML using DAB

References:

1. Mapping protein carboxymethylation sites provides insights into their role in proteostasis and cell proliferation. Simone Di Sanzo, et al. Nat Commun. Nov 18;12(1):6743, 2021. doi: 10.1038/s41467-021-26982-6.
2. Mapping sites of carboxymethyllysine modification on proteins reveals its consequences for proteostasis and cell proliferation. Simone Di Sanzo, et al. BioRxiv. 10.16.342311, 2020. doi: https://doi.org/10.1101/2020.10.16.342311.
3. Role of Nε-(Carboxymethyl)Lysine in the Development of Ischemic Heart Disease in Type 2 Diabetes Mellitus. Khaled A Ahmed, et al. J Clin Biochem Nutr. Aug 29;41(2):97–105, 2007. doi: 10.3164/jcbn.2007014

Doc. 100-RC0326
Rev. A