



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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## CEL (N-Epsilon)-Carboxyethyl-Lysine

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[nordicmubio.com/product/cel-n-epsilon-carboxyethyl-lysine](http://nordicmubio.com/product/cel-n-epsilon-carboxyethyl-lysine)

Catalogue number: **CEL025**

Clone	KNH-30
Isotype	IgG1
Product Type	Primary Antibodies
Units	50 µg
Host	Mouse
Application	ELISA Immunohistochemistry

### Background

This antibody is suitable for the detection of CEL in tissues and tissue extracts. Long-term incubation of proteins with glucose leads, through Schiff's 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 (i) human lens, (ii) renal proximal tubules in patients with diabetic nephropathy and chronic renal failure, (iii) atherosclerotic lesions of arterial walls, (iv)  $\beta$ 2-microglobulin of carpal tunnel amyloid fibril deposits in patients with hemodialysis-related amyloidosis and (v) brain tissues of patients with Alzheimer's disease. According to McLellan et al. (1994) CEL is formed as a reaction product of methylglyoxal (MG) with proteins in diabetes patients. In these patients up to 7 times higher MG-values were measured in comparison to healthy subjects. In lenses of diabetic patients CEL concentration was found to be as high as that of CML [N-epsilon-(carboxymethyl)lysine].

### Source

*Immunogen:* N-epsilon-(Carboxyethyl)-Lysine-BSA

### Product

Protein G affinity purified antibody from ascites in stabilized buffer, PBS + 2% Block ACE and 0,1% Proclin as a bacteriostat

*Purification Method:* Protein G affinity purified antibody from ascites in stabilized buffer, containing 50% Block Ace? (Casein-containing solution, Dainippon Co.) and 0.1% ProClin? (Rohm & Haas) as a preservative

*Concentration:* 0.25 mg/ml

*Secondary Reagents:* We recommend the use of BIOLOGO's Universal Staining System DAB (Art. No. DA005) or AEC (Art. No. AE005).

## **Applications**

IHC, ELISA

*Incubation Time:* 60 min at RT or 18 hr at 2-8°C

*Working Concentration:* (liquid conc.) ELISA 0.1-0.5 µg/ml; IHC 2 µg/ml

*Positive Control:* Diabetic lens cataract

## **Storage**

-20°C

## **Caution**

This product is intended FOR RESEARCH USE ONLY, and FOR TESTS IN VITRO, not for use in diagnostic or therapeutic procedures involving humans or animals. It may contain hazardous ingredients. Please refer to the Safety Data Sheets (SDS) for additional information and proper handling procedures. Dispose product remainders according to local regulations. This datasheet is as accurate as reasonably achievable, but Nordic-MUBio accepts no liability for any inaccuracies or omissions in this information.

## **References**

1. Horiuchi S., Araki N., and Morino Y. (1991) Immunological approach to characterize advanced glycation end products of the Maillard reaction: Evidence for the presence of a common structure. *J. Biol. Chem.* 266; 7329-7332.
2. McLellan AC, Thornalley PJ, Benn J, Sonksen PH (1994) Glyoxalase system in clinical diabetes mellitus and correlation with diabetic complications. *Clinical Science* 87: 21-29.
3. Ahmed MU, Brinkmann E, Degenhardt TP, Thorpe SR, Baynes JW (1997) Ne-(Carboxyethyl)lysine, a product of the chemical modification of proteins by methylglyoxal, increases with age in human lens proteins. *Biochem J* 324:565-570.
4. Degenhardt TP, Thorpe SR, Baynes JW (1998) Chemical modification of proteins by methylglyoxal. *Cell Mol Biol* 44:1139-1145.