

Nepsilon-(carboxyethyl) lysine (CEL) ELISA Kit | CEL elisa kit

OxiSelect Nepsilon-(carboxyethyl) lysine (CEL) Competitive ELISA Kit

CATALOG #
AAA44702

REACTIVITY
Nepsilon-(carboxyethyl) lysine

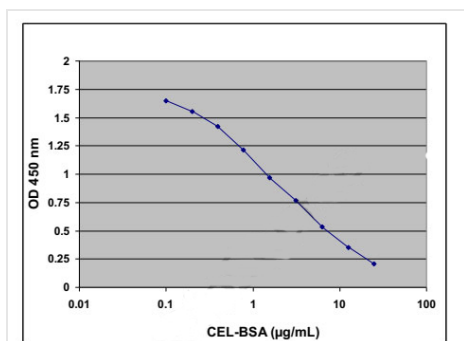
PRODUCT SYNONYMS

Nepsilon-(carboxyethyl) lysine (CEL); OxiSelect Nepsilon-(carboxyethyl) lysine (CEL) Competitive ELISA Kit; CEL elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Nepsilon-(carboxyethyl) lysine
Detection Method	Colorimetric
Notes	Provides rapid detection and quantitation of CEL protein adducts Perform up to 5x96 assays, including standard curve and unknown protein samples Will not cross react with CML protein adducts

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for CEL elisa kit	Background: The non-enzymatic reaction of reducing carbohydrates with lysine side chains and N-terminal amino groups of macromolecules (proteins, phospholipids and nucleic acids) is called the Maillard reaction or glycation. The products of this process, termed advanced glycation end products (AGEs), adversely affect the functional properties of proteins, lipids and DNA. Tissue levels of AGE increase with age and the formation of AGEs is predominantly endogenous, though these products can also be derived from exogenous sources such as food and tobacco smoke. AGE modification of proteins can contribute to the pathophysiology of aging and long-term complications of diabetes, atherosclerosis and renal failure. AGEs also interact with a variety of cell-surface AGE-binding receptors (RAGE), leading either to their endocytosis and degradation or to cellular activation and pro-oxidant or proinflammatory events. Although several AGE structures have been reported, it was demonstrated that Nepsilon-(carboxymethyl) lysine (CML) and Nepsilon-(carboxyethyl) lysine (CEL) are the major antigenic AGE structures. Next to glucose, reactive di-carbonyl compounds such as methylglyoxal are major precursors in the formation of cellular and extracellular AGEs. Methylglyoxal reacts with lysine residues to form CEL. CEL concentration is increased in patients who have diabetes with complications. OxiSelect™ Nepsilon-(carboxyethyl) lysine (CEL) ELISA Kit provides rapid detection and quantitation of CEL protein adducts. The quantity of CEL adduct in protein samples is determined by comparing its absorbance with that of a known CEL-BSA standard curve. Each kit provides sufficient reagents to perform up to 96 assays, including standard curve and unknown protein samples. Principle of the Assay: First, a CEL conjugate is coated on the ELISA plate. The unknown CEL protein samples or CELBSA standards are then added to the CEL conjugate preabsorbed plate. After a brief incubation, the anti-CEL monoclonal antibody is added, followed by an HRP conjugated secondary antibody. The content of CEL protein adducts in unknown samples is determined by comparison with the predetermined CEL-BSA standard curve. Despite the structure similarity between CEL and CML, the anti-CEL specific antibody in the OxiSelect™ CEL ELISA Kit will not cross react with CML protein adducts.
Product Categories/Family for CEL elisa kit	Oxidative Stress/ Damage; Protein Oxidation/Nitration; Advanced Glycation End Products; CEL (N-epsilon-(Carboxyethyl) Lysine) Assays and Reagents; CEL Competitive ELISA

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/elisa-kits/nepsilon-carboxyethyl-lysine-cel/44702>