Protein Carbonyl ELISA kit

High sensitivity ELISA for quantitative determination of carbonylated protein levels in plasma, other body fluids, cell and tissue extracts.

The Protein carbonyl ELISA kit is an antibody-based detection set. It has higher sensitivity, lower background, is less labour-intensive and handles more samples per day as compared to colorimetric assays.

Protein carbonyls are formed by a variety of oxidative mechanisms and are sensitive indices of oxidative injury. The quantity of protein carbonyls in a protein sample can be determined by derivatising with dinitrophenylhydrazine (DNP) and measure bound DNP colorimetrically or immunologically. The ELISA method enables carbonyls to be measured quantitatively with microgram quantities of protein.

- High sensitivity ELISA, detecting low levels of carbonylated proteins
- Validated in various sample types
- Fully quantitative results that surpass semi-quantitative Western blot analysis

Ordering Information

Order Online »

ALX-850-312A	96 wells

Manuals, SDS & CofA

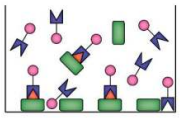
View Online »

Key:

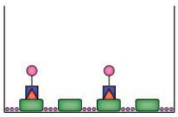
Protein | Carbonyl group | Biotin hydrazide

Blocking agent | Streptavidin-linked horseradish peroxidase

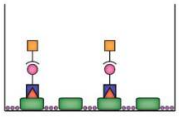
TMB | Oxidised TMB (basic) | Oxidised TMB (acidic)

1. 

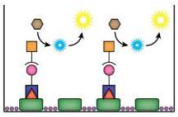
Protein samples that have been derivatised with biotin hydrazide are added and directly bound to the ELISA plate, saturating all protein-binding sites.

2. 

Excess protein and biotin hydrazide are washed away, and unoccupied binding sites are blocked.

3. 

Streptavidin-linked horseradish peroxidase is bound to the biotin hydrazide-protein complex.

4. 

Chromogen, containing TMB and H_2O_2, is added and the horseradish peroxidase catalyses the oxidation of TMB by H_2O_2 to a blue product. The reaction is stopped by the addition of acid, which enhances the sensitivity and gives a yellow product that can be measured at 450 nm.

Handling & Storage

Use/Stability	Freezer (-20 °C): Components F, K and L. Fridge (4 °C): Components H and I. Store the remainder of the kit at room temperature.
Shipping	Ambient Temperature

Regulatory Status

RUO - Research Use Only

Product Details

Compatibility	This product is compatible with the **Absorbance 96 Plate Reader**.
Wavelength	450 nm

Last modified: January 19, 2026

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