

Product datasheet for R1147HRPS

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Fructosyl-Amino Acid Oxidase Sheep Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, IP, WB

Recommended Dilution: Suitable for immunoblotting (Western or dot blot), ELISA, immunoprecipitation, conjugation

and most immunological methods requiring high titer and specificity.

Recommended Diutions: Western blot: 1/500-1/5,000. Immunoprecipitation: 1/100. ELISA: 1/5,000-1/20,000.

This product has been assayed against 1.0 µg of fructosyl-amino acid oxidase

[Corynebacterium sp.] in a standard sandwich ELISA using ABTS as a substrate for 30 minutes

at room temperature. A working dilution of 1/1,000 to 1/3,000 of the reconstitution

concentration is suggested for this product.

Reactivity: Bacteria
Host: Sheep
Clonality: Polyclonal

Immunogen: Fructosyl-amino acid oxidase from *Corynebacterium sp.* (expressed in *E.coli*)

Specificity: This antibody detects fructosyl-amino acid oxidase [Corynebacterium sp.].

Immunoelectrophoresis gives a single precipitin arc against anti-peroxidase, anti-sheep serum as well as purified and partially purified fructosyl-amino acid oxidase [Coryneb. sp.].

Formulation: 0.02 M Potassium phosphate, 0.15 M Sodium chloride, pH 7.2

Label: HRP State: Purified

State: Lyophilized purified Ig fraction

Stabilizer: 10 mg/ml BSA (immunoglobulin and protease free)

Preservative: 0.01% (w/v) Gentamicin sulfate (Do NOT add Sodium azide!)

Label: Horseradish peroxidase

Reconstitution Method: Restore with 0.1 ml of deionized water (or equivalent).

Concentration: lot specific

Purification: Multi-step process includes delipidation, salt fractionation and ion exchange chromatography

followed by extensive dialysis against the buffer





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Conjugation: HRP

Storage: Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month or (in alignots) at -

20°C long term. Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Database Link: Q8RIU8

Background: Fructosyl amino acid oxidase (FAOX or FAOD) catalyzes the oxidative deglycation of fructosyl

amino acids, yielding the corresponding amino acid, glucosone, and hydrogen peroxide. Glucose can be attached to aminoacids by a nonenzymatic reaction called "glycation", to

distinguish it from the enzymatic glycosylation of proteins.

FAOX can be used for the enzymatic detection of nonenzymatically glycated proteins. Glycation of protein has been implicated in the development of diabetic complications and the aging process. Glycation of blood proteins such as hemoglobin and albumin is enhanced in diabetics with high blood glucose. The amounts of these glycated proteins reflect the level of blood glucose in periods corresponding to the half life of the protein (14 to 20 days for albumin and 1 to 2 months for hemoglobin). Since the glycation of blood proteins is not affected by transient increases in blood glucose, the levels of glycated proteins are good indices for monitoring diabetes mellitus patients during therapy. HbA1c, blood levels of which are a good index of the long term control of blood glucose in patients with diabetes mellitus, is defined as an amino end of the ß subunit (valine residue) of hemoglobin that has been

glycated nonenzymatically.