

R1147BS**Polyclonal Antibody to Fructosyl-Amino Acid Oxidase - Biotin****Quantity:**

0.1 mg

Concentration:

1.0 mg/ml (by UV absorbance at 280 nm)

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 amino acids 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 β subunit (valine residue) of hemoglobin that has been glycated nonenzymatically.

Uniprot ID:[Q8RIU8](#)**NCBI:**[175533](#)**Host:**

Sheep

Immunogen:Fructosyl-amino acid oxidase from *Corynebacterium sp.* (expressed in *E.coli*)**Format:****State:** Lyophilized purified Ig fraction**Purification:** Multi-step process includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer**Buffer System:** 0.02 M Potassium phosphate, 0.15 M Sodium chloride, pH 7.2**Preservatives:** 0.01% (w/v) Sodium azide**Stabilizers:** 10 mg/ml BSA (immunoglobulin and protease free)**Label:** Biotin**Reconstitution:** Restore with 0.1 ml of deionized water (or equivalent).**Applications:**

Suitable for immunoblotting (Western or dot blot), ELISA, immunoprecipitation, conjugation and most immunological methods requiring high titer and specificity.

Recommended Dilutions:**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 μ g of fructosyl-amino acid oxidase [*Corynebacterium sp.*] in a standard sandwich ELISA using peroxidase conjugated streptavidin and ABTS as a substrate for 30 minutes at room temperature. A working dilution of 1/8,000 to 1/34,000 of the reconstitution concentration is suggested for

this product.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody detects fructosyl-amino acid oxidase [*Corynebacterium sp.*]. Immunoelectrophoresis gives a single precipitin arc against anti-biotin, anti-sheep serum as well as purified and partially purified fructosyl-amino acid oxidase [*Coryneb. sp.*].

Species: *Corynebacterium sp.*

Other species not tested.

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 aliquots) at -20°C long term. Avoid repeated freezing and thawing.

Shelf life: one year from despatch.