

32-6889: PON1 Human, HEK

Application : Functional Assay

Alternative Name : Serum paraoxonase/arylesterase 1, Serum aryldialkylphosphatase 1, Aromatic esterase 1, A-esterase 1, Serum aryldialkylphosphatase 1, paraoxonase 1, K-45, ESA, PON, MVCD5

Description

Source: HEK293 Cells.

Sterile Filtered colorless solution.

Paraoxonase-1 or PON1 is part of the paraoxonase group of proteins. PON1 is an enzyme, responsible to the toxic metabolites of a different of organophosphorus insecticides hydrolyzation. Furthermore, PON1 is a dominant anti-atherosclerotic part of HDL. The enzyme needs PPAR-gamma for activation, leading to synthesis and release of paraoxonase 1 from the liver tissue, resulting in atherosclerosis reduction. PON1 has many qualities for atheroprotective through inflammatory lipid peroxides metabolism. This enzyme can hydrolyze a large number of substrates, for example cyclic carbonates, lactones, nerve gases etc.

PON1 Human Recombinant produced in HEK cells is a single, glycosylated, polypeptide chain (16-355 a.a) containing a total of 346 amino acids, having a molecular mass of 39.0kDa. PON1 is fused to a 6 amino acid His-tag at C-terminus, and is purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 90.0% as determined by SDS-PAGE.

Content : The PON1 solution (0.25mg/ml) contains 20% Glycerol and Phosphate-Buffered Saline (pH 7.4).

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Amino Acid : LFRNHQSSYQ TRLNALREVQ PVLPNCNLV KGIETGSEDL EILPNGLAFI SSGLKYPGKI SFNPNSPGKI
LLMDLNEEDP TVLELGITGS KFDVSSFNPH GISTFTDEDN AMYLLVVNHP DAKSTVELFK FQEEKSLH
LKTIRHKLLP NLNDIVAVGP EHFYGTNDHY FLDPYLQSW MYLGLAWSYV VYSPSEVRV VAEGDFDANG
INISPDGKYV YIAELLAHKI HVYEKHANWT LTPLKSLDFN TLVDNISVDP ETGDLWVGCH PNGMKIFFYD
SENPPASEVL RIQNILTEEP KVTQVYAENG TVLQGSTVAS VYKGKLLIGT VFHKALYCEL HHHHHH

Application Note

Specific activity is > 2,500 pmol/min/ug. Defined by the amount of enzyme that $\hat{\hat{A}}$ hydrolyzes 1pmole of p-nitrophenyl acetate to p-nitrophenol per minute at pH 7.5 at 37 $\hat{\hat{A}}$ °C.