

## 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 SSGLYKPGIK SFNPNSPGKI  
LLMDLNEEDP TVLELGITGS KFDVSSFNPH GISTFTDEDN AMYLLVVNHP DAKSTVELFK FQEEKSLH  
LKTIRHKLLP NLNDIVAVGP EHFYGTNDHY FLDPYLQSW E MYLGLAWSYV VYSPSEVRV VAEGDFDANG  
INISPDGKYV YIAELLAHKI HVYEKHWNT LTPLKSLDFN TLVDNISVDP ETGDLWVGCH PNGMKIFFYD  
SENPPASEVL RIQNILTEEP KVTQVYAENG TVLQGSTVAS VYKGLLIGT 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.