Product Data Sheet

Product Name:	PON1 Human, HEK
Cat. No.:	GP26173
Batch No.:	1

Product Data

Purity	>98%	Source	HEK293 Cells.
Phycical Appearance	solid	Shipping Condition	withIcePacks
Synonyms	Serum paraoxonase/arylesterase 1, Serum aryldialkylphosphatase 1, Aromatic esterase 1, A-esterase 1 , Serum aryldialkylphosphatase 1, paraoxonase 1, K-45, ESA, PON, MVCD5		
Amino Acid Sequence	LFRNHQSSYQ TRLNALREVQ PVELPNCNLV KGIETGSEDL EILPNGLAFI SSGLKYPGIK SFNPNSPGKI LLMDLNEEDP TVLELGITGS KFDVSSFNPH GISTFTDEDN AMYLLVVNHP DAKSTVELFK FQEEEKSLLH LKTIRHKLLP NLNDIVAVGP EHFYGTNDHY FLDPYLQSWE MYLGLAWSYV VYYSPSEVRV VAEGFDFANG INISPDGKYV YIAELLAHKI HVYEKHANWT LTPLKSLDFN TLVDNISVDP ETGDLWVGCH PNGMKIFFYD SENPPASEVL RIQNILTEEP KVTQVYAENG TVLQGSTVAS VYKGKLLIGT VFHKALYCEL HHHHHH		
Formulation	The PON1 solution (0.25mg/ml) contains 20% Glycerol and Phosphate-Buffered Saline (pH 7.4).		

Introduction

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.

Biological Activity

Specific activity is > 2,500 pmol/min/ug. Defined by the amount of enzyme that

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hydrolyzes 1pmole of pnitrophenyl acetate to p-nitrophenol per minute at pH 7.5 at 37? C.

Stability

Store at 4бyC if entire vial will be used within 2-4 weeks. Store, frozen at -20бyC 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.

Background

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.