

DESCRIPTION

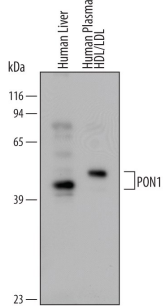
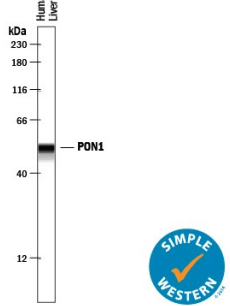
Species Reactivity	Human
Specificity	Detects human PON1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PON1 Ala30-Leu355 Accession # P27169
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below
Simple Western	5 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human PON1 by Western Blot. Western blot shows lysates of human liver tissue. PVDF membrane was probed with 0.5 µg/mL Goat Anti-Human PON1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5816) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). For additional reference, an enriched HDL/LDL fraction obtained from ultracentrifugation of human plasma was included. A specific band for PON1 was detected at approximately 43 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.</p>	<p>Simple Western</p>  <p>Detection of Human PON1 by Simple Western™. Simple Western lane view shows lysates of human liver tissue, loaded at 0.2 mg/mL. A specific band was detected for PON1 at approximately 52 kDa (as indicated) using 5 µg/mL of Goat Anti-Human PON1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5816) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The paraoxonase (PON) gene family of antioxidant enzymes includes three known members located adjacent to each other on chromosome 7. Paraoxonase/arylesterase 1 (PON1, also known as serum paraoxonase) is a 355 amino acid, 43 kDa glycoprotein that is expressed in liver and is secreted into the bloodstream where it associates with high-density lipoproteins (HDL). Serum PON1 concentrations vary widely among normal individuals, in part due to differential expression of some polymorphisms. Sequence polymorphisms in this gene may be associated with coronary heart disease and a number of phenotypes related to diabetes. PON1 is primarily a lactonase (EC 3.1.8.1) that is thought to attenuate the oxidation of low-density lipoproteins (LDL). This may slow the initiation and progression of atherosclerosis. Human PON1 shares 83% and 81% aa identity with mouse and rat PON1, respectively.