

Polyclonal Antibody to Elastase (Pankreatic) - Purified

Catalog No.:	BP430
Quantity:	1 ml
Concentration:	5.7 mg/ml
Background:	<p>Elastases form a subfamily of serine proteases that hydrolyze many proteins in addition to elastin. Elastase is a serine protease which exhibits endopeptidase activity on many proteins, its principal substrate, however, is elastin and it is unique among proteases in its ability to hydrolyse native elastin. It is present in the pancreas, leukocytes and serum. Elastase consists of a single polypeptide chain with a molecular weight of 29.5kDa. Humans have six elastase genes which encode the structurally similar proteins elastase 1, 2, 2A, 2B, 3A, and 3B. Like most of the human elastases, elastase 2A is secreted from the pancreas as a zymogen. In other species, elastase 2A has been shown to preferentially cleave proteins after leucine, methionine, and phenylalanine residues. Elastase 1 is not a pancreatic enzyme: clinical literature that describes human elastase 1 activity in the pancreas is actually referring to elastase 2A.</p>
Host:	Sheep
Immunogen:	Highly purified porcine pancreatic Elastase.
Format:	<p>State: Liquid purified Ig fraction.</p> <p>Purification: Chromatography on Protein G</p> <p>Buffer System: PBS, pH 7.2 without preservatives.</p>
Applications:	<p>ELISA (1/3000-1/12000): In a simple screening ELISA using 1 µg/well of porcine elastase the 50% maximal OD is obtained at a dilution of around 1/6000, with alkaline phosphatase conjugated anti-sheep for detection. All incubations at 18°C using pNPP substrate, with OD measurements at 405 nm. The end point titre for this antibody is 1/80,000.</p> <p>Also reactive with human neutrophil elastase in simple competitive assay at similar dilutions (1/5,000) using plates coated with porcine antigen, giving a sensitive assay for this analyte.</p> <p>Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.</p>
Specificity:	<p>Reacts with Porcine Elastase and Human neutrophil elastase.</p> <p>This antibody is expected to react with elastase from other species.</p> <p>Species: Human and Pig.</p> <p>Other species not tested.</p>
Storage:	<p>Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.</p> <p>Avoid repeated freezing and thawing.</p> <p>Shelf life: one year from despatch.</p>