

Human Ulinastatin - Purified

Catalog No.: AR10115PU-N

Quantity: 5 mg

Background: Urinary-Trypsin Inhibitor is a glucoprotein proteinase inhibitor with a molecular weight of about 67,000 derived from human urine which inhibits the activity of trypsin, chymotrypsin, lactate, lipase, hyaluronidase and various pancreatic enzymes. Ulinastatin is effective for acute pancreatitis, chronic recurrent pancreatitis and hemorrhagic, traumatic and endotoxic shocks. Ulinastatin has strong inhibition effect to various protease, sugar and fat hydrolase. Ulinastatin precursor is proteolytically processed into distinct functioning proteins. Urinary trypsin inhibitor belongs to the superfamily of Kunitz-type protease inhibitors and plays an important role in many physiological and pathological processes. Uristatin gene is located on chromosome 9 in a cluster of lipocalin genes.

High levels of Ulinastatin secretion is an early marker of renal tubular involvement and has radical scavenging activity. Bikunin localizes cell membrane.

Free uristatin and bikunin pass readily into urine and are primarily bound to heavy chains that constitute the proinhibitor form in plasma.

Ulinastatin particularly interacts with ORF3 protein of hepatitis E virus and in charge for enhancing alpha microglobulin export from the hepatocyte.

Species: Human

Source: Human Urine

Format: **State:** Sterile Filtered White lyophilized (freeze-dried) powder.

Purity: >98.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Buffer System: Lyophilized from a (1mg/ml) solution containing no additives.

Reconstitution: Restore the lyophilized HuUTI in sterile 18MΩ·cm⁻¹ H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Description: Urinary Trypsin Inhibitor (UTI, Ulinastatin) is a kind of glucoprotein derived from Human Urine. As a proteinase inhibitor, it inhibits the activity of trypsin, chymotrypsin, lactate, lipase, hyaluronidase and other pancreatic enzymes. UTI is effective for acute pancreatitis, chronic recurrent pancreatitis and hemorrhagic, traumatic and endotoxic shocks. UTI has strong inhibition effect to various protease, sugar and fat hydrolase.

Biological Activity: Human UTI has an activity of 1000IU/mg.

Storage:

Lyophilized Human UTI although stable at RT for 3 weeks, should be stored desiccated below -18°C.

Upon reconstitution Human UTI should be stored at 2-8°C between 2-7 days and for future use below -18°C.

Please prevent freeze-thaw cycles.

Shelf life: One year from despatch.