

32-5191: Human Urinary Trypsin Inhibitor (UTI)

Alternative Name : UTI, Bikunin, Uristatin, Ulinastatin, AMBP, EDC1, HI30, ITIL, IATIL, ITILC, Urinary Trypsin Inhibitor.

Description

Source : Human Urine. Ulinastatin is derived from human urine. Urinary-Trypsin Inhibitor is a glucoprotein proteinase inhibitor 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. UTI has a calculated Mw of approx. 20kDa and 40kDa by SDS-PAGE analysis. Ulinastatin particularly interacts with ORF3 protein of hepatitis E virus and in charge for enhancing alpha microglobulin export from the hepatocyte.

Product Info

Amount :	5 mg
Purification :	Greater than 98.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Content :	Lyophilized from a (1mg/ml) solution containing no additives.
Storage condition :	Lyophilized UTI although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution UTI should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

Application Note

It is recommended to reconstitute the lyophilized UTI in sterile 18M $\hat{\circ}$ -cm H₂O not less than 100 $\hat{\mu}$ g/ml, which can then be further diluted to other aqueous solutions. Human UTI has an activity of 2390IU/mg.

