



Product Datasheet

Product Name	Uromodulin Human
Cata No	CB501390
Source	<i>Human Urine.</i>
Synonyms	Tamm-Horsfall urinary glycoprotein, THP, FJHN, HNFJ, THGP, MCKD2, ADMCKD2, UMOD, Uromodulin.

Description

Uromodulin is the most abundant protein in normal urine. Its secretion in urine follows proteolytic cleavage of the ectodomain of its glycosyl phosphatidylinositol-anchored counterpart that is situated on the luminal cell surface of the loop of Henle. Uromodulin plays a role as a constitutive inhibitor of calcium crystallization in renal fluids. Secretion of uromodulin in urine provides protection against urinary tract infections caused by uropathogenic bacteria. Defects in Uromodulin expression are associated with the autosomal dominant renal disorders medullary cystic kidney disease-2 (MCKD2) and familial juvenile hyperuricemic nephropathy (FJHN). These disorders are characterized by juvenile onset of hyperuricemia, gout, and progressive renal failure. While several transcript variants may exist for this gene, the full-length natures of only two have been described to date. UMOD is involved in regulating the circulating activity of cytokines as it binds to il-1, il-2 and tnf with high affinity.

Physical Appearance

Filtered White Lyophilized (freeze-dried) powder.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Formulation

The UMOD protein was lyophilized from 0.4µm filtered solution at a concentration of 0.6mg/mL containing water.

Reconstitution

Add deionized water to prepare a working stock solution of approximately 0.5mg/mL and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Stability

Lyophilized UMOD although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution UMOD should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.