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## Recombinant Human UPK3A Protein, N-His

Catalog Number: bs-105703P

Species: Human

AA Seq: 15-211/287

Predicted MW: 23.54 kDa

Tags: N-His

Purity: >90% as determined by SDS-PAGE.

Purification: AC

Form: Lyophilized

Storage: Lyophilized from a solution in PBS pH 7.4, 0.02% NLS, 1mM EDTA, 4% Trehalose, 1% Mannitol.

Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8°C for frequent use. Store at -20 to -80°C for twelve months from the date of receipt.

**Background:** The asymmetric unit membrane (AUM) forms numerous plaques, which cover the apical surface of the urothelium. These plaques are thought to strengthen the urothelium and reduce the risk of rupturing during ladder distention. They are composed of four major integral membrane proteins called uroplakins (UP). The uroplakin family comprises UPIa, UPIb, UPII, and UPIII. Family members are conserved among several species, including human, mouse, rat, rabbit, dog, pig and sheep. UPIa and UPIb form tightly packed structures with UPII and UPIII, respectively. This pairing is required for normal urothelial plaque formation and is regulated by proteolytic processing of the uroplakin proteins. Uroplakins are expressed in normal urothelium and are used as specific markers of urothelial differentiation. They are also expressed in a majority of transitional cell carcinomas of the bladder (TCCs), which make the uroplakins a useful marker for detecting bladder cancer metastasis and for staging and monitoring chemotherapeutic response.