

## Product Data Sheet

## FUOM/Fucose Mutarotase Protein, Human (His)

Cat. No.:	HY-P76940
Synonyms:	Fucose Mutarotase; FUOM; C10orf125
Species:	Human
Source:	E. coli
Accession:	A2VDF0 (M1-L154)
Gene ID:	282969
Molecular Weight:	Approximately 19 kDa

PROPERTIES	
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<b>Biological Activity</b>	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g}/\text{mL}$ in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

## **DESCRIPTION Background** The FUOM/Fucose Mutarotase Protein plays a crucial role in the interconversion between alpha- and beta-L-fucoses, where L-fucose, a 6-deoxy-L-galactose, coexists as alpha-L-fucose (29.5%) and beta-L-fucose (70.5%). Notably, the beta-form undergoes metabolic processes through the salvage pathway. GDP-L-fucose, generated via either the de novo or salvage pathways, is transported to the endoplasmic reticulum. There, it serves as a substrate for N- and O-glycosylations catalyzed by fucosyltransferases. Fucosylated structures expressed on cell surfaces or secreted in biological fluids are thought to play a pivotal role in cell-cell adhesion and recognition processes. The dynamic interconversion facilitated by FUOM highlights its significance in modulating the pool of available L-fucose, influencing essential glycosylation events crucial for various cellular functions.

## Caution: Product has not been fully validated for medical applications. For research use only.

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