

## PpSQ1\_00405 Protein, Pseudomonas putida

Cat. No.:	HY-P702157
Synonyms:	PpSQ1_00405; Sulfoquinovose 1-dehydrogenase; SQ dehydrogenase
Species:	Others
Source:	E. coli
Accession:	P0DOV5 (N2-Q260)
Gene ID:	/
Molecular Weight:	

### PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 µm filtered solution of 50 mM Tris-HCl, pH7.5, 200 mM NaCl, 20% glycerol.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

### DESCRIPTION

Background	PpSQ1_00405 is an enzyme that plays a pivotal role in the degradation pathway of sulfoquinovose (SQ) in Pseudomonas putida SQ1, enabling the bacterium to utilize SQ as its exclusive carbon and energy source for growth. This protein catalyzes the oxidation of sulfoquinovose, converting it into 6-deoxy-6-sulfo-D-glucono-1,5-lactone. Notably, PpSQ1_00405 exhibits a strong preference for NAD(+) as the electron acceptor in this oxidation reaction. The enzyme's ability to efficiently catalyze the conversion of sulfoquinovose underscores its significance in the microbial metabolism of SQ, shedding light on the pathways bacteria employ to utilize this sulfolipid as a nutrient source for sustaining growth and energy production.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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