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Product Data Sheet

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COPS5 Protein, Human

Cat. No.:	HY-P701437
Synonyms:	COPS5; COP9 signalosome complex subunit 5; SGN5; Signalosome subunit 5; Jun activation domain-binding protein 1
Species:	Human
Source:	E. coli
Accession:	Q92905 (A2-T257)
Gene ID:	10987
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.
Reconsititution	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

The COPS5 protein serves as the probable protease subunit within the COP9 signalosome complex (CSN), a vital regulator involved in diverse cellular and developmental processes. Operating as a crucial component of the CSN complex, COPS5 plays a central role in the regulation of the ubiquitin conjugation pathway by facilitating the deneddylation of the cullin subunits within SCF-type E3 ligase complexes. This deneddylation activity results in the reduction of Ubl ligase activity, impacting complexes such as SCF, CSA, or DDB2. Moreover, the CSN complex, in association with CK2 and PKD kinases, is implicated in the phosphorylation of various substrates, including p53/TP53, c-jun/JUN, IkappaBalpha/NFKBIA, ITPK1, and IRF8. COPS5 likely functions as the catalytic center mediating the cleavage of Nedd8 from cullins within the complex, thereby influencing the regulatory landscape of protein degradation. Its direct interaction with numerous proteins regulated by the CSN complex underscores its key role in mediating cellular processes and highlights its involvement in the proteasomal degradation of BRSK2.

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

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