Recombinant Human CER1/DAND4 Protein



RPCB1189

Product Information

Product SKU: Tag:	RPCB1189 C-His	Gene ID: Reactivity:	9350 Human		Size:	10µg	
Additional Infor	mation						
Expression Hos	t: HEK293 ce	HEK293 cells		O95813			
Purity :	> 95% by S	SDS-PAGE.					

Protein Information

Background: Cerberus 1, also called DAND4, is a member of the DAN domain family of BMP antagonists that includes DAN (DAND1), Gremlin/Drm (DAND2), PRDC (Protein Related to Dan and Cerberus; DAND3), and COCO/Dante (DAND5). DAN family members contain a cysteine-knot domain that is homologous to that found in other TGF-beta superfamily ligands. Mature human Cerberus 1 shares 67% and 68% amino acid (aa) sequence identity with mouse and rat Cerberus 1, respectively. Within the cysteine-knot domain, it shares 24%-37% aa sequence identity with mouse DAN, Gremlin, PRDC, and COCO. Cerberus 1 is a secreted 38 kDa glycoprotein that forms homodimers. Cerberus-S, which is generated by proteolysis in Xenopus, is a short version of the molecule and includes the C-terminal cysteine-knot domain. At the onset of gastrulation, Cerberus 1 is transiently expressed in anterior endodermal structures in response to Nodal and Shh . Cerberus 1 binds BMP-4 and Nodal and inhibits their activities. Xenopus Cerberus has also been shown to bind Xenopus Wnt8. These inhibitory functions of Cerberus favor mesodermal development in the anterior region of the gastrula and suppresses posterior mesodermal differentiation. In chick and Xenopus, Cerberus 1 also regulates, but is not required for embryonic left-right polarization, neurulation, and head and heart induction.

Protein Description:	High quality, high purity and low endotoxin recombinant Recombinant Human				
	CER1/DAND4 Protein , tested reactivity in HEK293 cells and has been validated in				
	SDS-PAGE.100% guaranteed.				
Endotoxin :	< 0.01EU/µg				
Formulation :	Lyophilized from a 0.22 μ m filtered solution of 25mM NaAc pH 7.4.				
Storage:	Store at -20°C.Store the lyophilized protein at -20°C to -80 °C up to 1 year from the				
	date of receipt.After reconstitution, the protein solution is stable at -20°C for 3				
	months, at 2-8°C for up to 1 week.				