Elabscience®

DAND5 Polyclonal Antibody

catalog number: AN006820L

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Reactivity	Mouse
Immunogen	Recombinant Human DAND5 protein expressed by E.coli
Host	Rabbit
Isotype	IgG
Purification	Antigen Affinity Purification
Buffer	PBS with 0.05% Proclin300, 1% protective protein and 50% glycerol, pH7.4
Applications	Recommended Dilution
WB	1:500-1:1000
Data	



Western blot with Anti DAND5 Polyclonal antibody at dilution of 1:1000. Lane 1: Mouse testis tissue lysate.

Observed-MW:20 kDa Calculated-MW:20 kDa

Preparation & Storage	
Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the
	temperature recommended.

Background

COCO, also known as DAND5, Dante, and CKTSF1B3, 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 Cerberus (DAND4). DAN family members contain a cysteine-knot domain that is homologous to that found in other TGF-beta superfamily ligands. BMPs play important roles in tissue morphogenesis and development processes. The human COCO cDNA encodes a 189 amino acid (aa) precursor with a 22 aa signal sequence. COCO has eight Cys residues in the cysteine-knot which places it in the CAN subfamily of BMP antagonists along with the other DAN family proteins. Human COCO shares 60% and 24% aa sequence identity with mouse and Xenopus COCO, respectively. It shares 17%, 20%, 25%, and 22% aa sequence identity with human DAN, Gremlin, PRDC, and Cerberus, respectively. In Xenopus embryonal development, COCO is expressed by pluripotent ectodermal cells. Expression is abruptly downregulated prior to gastrulation, and the loss of ectodermal cell pluripotency is coincident with COCO downregulation. COCO binds and inhibits Xnr1, BMP-4, Activin, and Wnt-8. In mouse, COCO expression is elevated on the right side of Henson's node at the early somite stage, in contrast to the left side expression of Nodal. COCO may cooperate with Nodal in gastrulation and embryonic left-right axis formation.