

DESCRIPTION

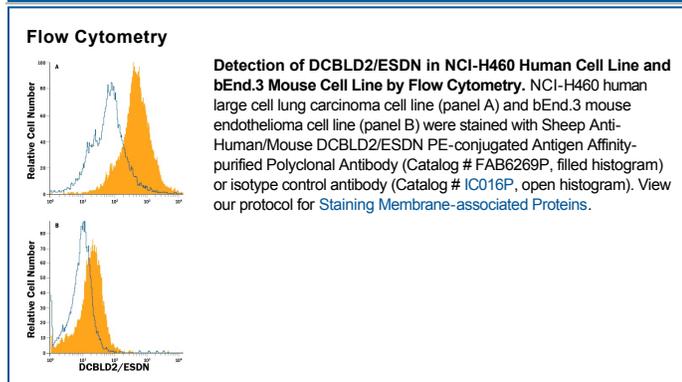
Species Reactivity	Human/Mouse
Specificity	Detects human and mouse DCBLD2/ESDN in Western blots and human DCBLD2/ESDN in direct ELISAs.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human DCBLD2/ESDN Gln67-Ala528 Accession # Q96PD2
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	10 μ L/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

DCBLD2 (Discoidin, CUB and CLLC Domain-containing 2), also known as ESDN and CLCP1, is a novel, 95-130 kDa protein that bears strong resemblance to the neuropilin family of proteins. It is a type I transmembrane glycoprotein whose ORF contains an extremely long signal sequence of 66 amino acid (aa) length. Mature human DCBLD2 is 709 aa in length, and contains a 462 aa extracellular region that is characterized by the presence of one CUB and F5/8 (or discoidin) domain (and thus its resemblance to Neuropilin), plus one 93 aa LCCL domain. Over aa 67-528, human and mouse DCBLD2 share 87% aa sequence identity. Although DCBLD2 expression is widespread (if not ubiquitous), cell types specifically reported to contain DCBLD2 include skeletal muscle cells, vascular endothelial and smooth muscle cells, and various primary tumor cells. The large variation in native molecular weight is attributable to a variable glycosylation state. It would appear that the higher MW forms are more sensitive to ligation than the lower MW forms, and one possible ligand for DCBLD2 has been suggested to be SEMA4B. The exact nature of the DCBLD2 signaling complex is unclear; it has been proposed that multiple interacting partners exist *in-cis*, and may include InsRb, VEGFR2, and PEGFR β . Notably, DCBLD2 appears to regulate the ubiquitination state of its receptor partners, and may either upregulate or downregulate receptor activity in a cell-specific manner.