

## Product Information

### Anti-ESDN Protein (DCBLD2)

Produced in rabbit, Affinity Isolated Antibody

Product Number **E 1781**

#### Product Description

Anti-ESDN Protein (DCBLD2) is produced in rabbit using as immunogen a peptide corresponding to the human ESDN protein (amino acids 399-416) (QDKIFQGNKDYHKDVRNN). The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-ESDN Protein (DCBLD2) reacts with human, mouse, and rat ESDN protein. The antibody may be used in immunoblotting (~85 kDa, calculation).

ESDN, a novel protein, belongs to neuropilin family. It is a type-I transmembrane protein with the longest cleavable secretory signal sequence among eukaryotes. ESDN is expressed in various tissues; particularly highly expressed in cultured vascular smooth muscle cells. ESDN is considered to play a role in regulation of vascular cell growth and may have a wide variety of functions in other tissues including the nervous system, like neuropilins.

The membrane-bound isoform 1 is a receptor involved in the development of the cardiovascular system, in angiogenesis, in the formation of certain neuronal circuits, and in organogenesis outside the nervous system. It mediates the chemorepulsant activity of semaphorins, binds to semaphorin 3a, the PIGF-2 isoform of PGF, the VEGF-165 isoform of VEGF and VEGF-B. Coexpression with KDR results in increased VEGF-165 binding to KDR as well as increased

chemotaxis. It may regulate VEGF-induced angiogenesis.

#### Reagent

The antibody is supplied as a solution of ~1 mg/mL in phosphate buffered saline containing 0.02% sodium azide.

#### Precautions and Disclaimer

Due to the sodium azide content a material safety sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

#### Storage/Stability

Store at -20 °C. The product may be stored at 2-8 °C for up to three months. For prolonged storage, freeze in working aliquots at -20 °C. Avoid repeated freezing and thawing. Do not store in a "frost-free" freezer.

#### Product Profile

For immunoblotting, a working antibody dilution of 1:500-1:1,000 is recommended.

Note: In order to obtain the best results in various techniques and preparations, we recommend determining optimal working dilutions by titration.

#### References

1. Kobuke, K., et al, J. Biol. Chem., **276**, 34105-34114 (2001).

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