



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Endoglin (A-8): sc-376381

BACKGROUND

Hereditary hemorrhagic telangiectasia (HHT) is an autosomal dominant disorder characterized by vascular abnormalities such as dilated vessels, hemorrhages, liver and lung congestion, and brain or heart ischemia. Mutations in two genes, Endoglin (also designated CD105) and ALK-1 (activin receptor-like kinase 1, also designated TGF β superfamily RI), are responsible for HHT. Endoglin is mutated in HHT1, and ALK-1 is mutated in HHT2, both of which are thought to be caused by haploinsufficiency. Endoglin and ALK-1 are type III and type I members of the TGF β receptor superfamily, respectively, that are expressed on vascular endothelial cells. Endoglin can only bind ligands of the TGF β superfamily via association with the respective ligand binding receptors for TGF β 1, TGF β 3, Activin-A, BMP-2 and BMP-7. The human ALK-1 gene encodes two protein species which exist as a result of either glycosylation or alternative splicing events. ALK-1 preferentially binds TGF β 1 and is expressed in bone marrow stromal cells, lung, brain, kidney and spleen.

REFERENCES

1. Wu, X., et al. 1995. Cloning and characterization of the murine activin receptor like kinase-1 (ALK-1) homolog. *Biochem. Biophys. Res. Commun.* 216: 78-83.
2. Altomonte, M., et al. 1996. Expression and structural features of Endoglin (CD105), a transforming growth factor β 1 and β 3 binding protein, in human melanoma. *Br. J. Cancer* 74: 1586-1591.
3. Gallione, C.J., et al. 1998. Mutation and expression analysis of the Endoglin gene in hereditary hemorrhagic telangiectasia reveals null alleles. *Hum. Mutat.* 11: 286-294.
4. Klaus, D.J., et al. 1998. Novel missense and frameshift mutations in the Activin receptor-like kinase-1 gene in hereditary hemorrhagic telangiectasia. Mutations in brief no. 164. Online. *Hum. Mutat.* 12: 137.

CHROMOSOMAL LOCATION

Genetic locus: ENG (human) mapping to 9q34.11.

SOURCE

Endoglin (A-8) is a mouse monoclonal antibody raised against amino acids 27-326 of Endoglin of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Endoglin (A-8) is available conjugated to agarose (sc-376381 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376381 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376381 PE), fluorescein (sc-376381 FITC), Alexa Fluor[®] 488 (sc-376381 AF488), Alexa Fluor[®] 546 (sc-376381 AF546), Alexa Fluor[®] 594 (sc-376381 AF594) or Alexa Fluor[®] 647 (sc-376381 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-376381 AF680) or Alexa Fluor[®] 790 (sc-376381 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor[®] is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

Endoglin (A-8) is recommended for detection of Endoglin dimer under non-reducing conditions, and Endoglin monomer under reducing conditions of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

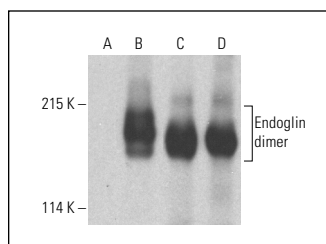
Suitable for use as control antibody for Endoglin siRNA (h): sc-35302, Endoglin shRNA Plasmid (h): sc-35302-SH and Endoglin shRNA (h) Lentiviral Particles: sc-35302-V.

Molecular Weight of reduced Endoglin: 84 kDa.

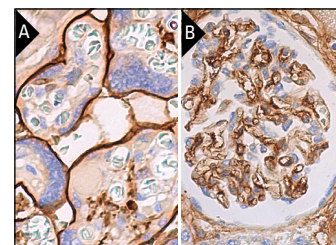
Molecular Weight of non reduced Endoglin: 130 kDa.

Positive Controls: human spleen extract: sc-363779, human kidney extract: sc-363764 or Endoglin (h): 293T Lysate: sc-170141.

DATA



Endoglin (A-8): sc-376381. Western blot analysis of Endoglin expression in non-transfected: sc-117752 (A) and human Endoglin transfected: sc-170141 (B) 293T whole cell lysates and human spleen (C) and human kidney (D) tissue extracts under non-reducing conditions.



Endoglin (A-8): sc-376381. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing membrane staining of trophoblastic cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing membrane and cytoplasmic staining of cells in glomeruli and cytoplasmic staining of cells in tubules (B).

SELECT PRODUCT CITATIONS

1. Duan, C.L., et al. 2014. Tumor vascular homing Endoglin-targeted radioimmunotherapy in hepatocellular carcinoma. *Tumour Biol.* 35: 12205-12215.
2. Delcourt, N., et al. 2015. Targeted identification of sialoglycoproteins in hypoxic endothelial cells and validation in zebrafish reveal roles for proteins in angiogenesis. *J. Biol. Chem.* 290: 3405-3417.
3. Wang, J., et al. 2016. Relationship of liver X receptors α and Endoglin levels in serum and placenta with preeclampsia. *PLoS ONE* 11: e0163742.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.