

BAI-2 (T-20): sc-33464

BACKGROUND

Brain-specific angiogenesis inhibitors, including BAI-1, BAI-2 and BAI-3, are integral membrane proteins belonging to the G protein-coupled receptor two family. In addition to inhibiting angiogenesis in the brain, BAI proteins are also expressed in the heart, thymus, skeletal muscle and a variety of cell lines. Expression patterns of BAI-2 in the developing brain distinctly increase as development progresses. Localization of BAI-2 in most neurons of the cerebral cortex is analogous with BAI-1 expression. The activity of brain-specific angiogenesis inhibitor proteins has been inversely correlated with vascularization in some cancer tissues. Ischemic brain shows notably decreased expression of BAI-2 after hypoxia, which precludes increased expression of vascular endothelial growth factor, VEGF. A better understanding of the anti-angiogenic activity of these BAIs may offer potential therapeutic benefits.

REFERENCES

1. Nishimori, H., et al. 1997. A novel brain-specific p53-target gene, BAI-1, containing thrombospondin type 1 repeats, inhibits experimental angiogenesis. *Oncogene* 15: 2145-2150.
2. Shiratsuchi, T., et al. 1998. Cloning and characterization of BAI-associated protein 1: a PDZ domain-containing protein that interacts with BAI-1. *Biochemistry* 247: 597-604.
3. Kee, H.J., et al. 2002. Expression of brain-specific angiogenesis inhibitor 2 (BAI-2) in normal and ischemic brain: involvement of BAI-2 in the ischemia-induced brain. *J. Cereb. Blood Flow Metab.* 22: 1054-1067.
4. Kaur, B., et al. 2003. Brain angiogenesis inhibitor 1 is differentially expressed in normal brain and glioblastoma independently of p53 expression. *Am. J. Pathol.* 162: 19-27.
5. Kee, H.J., et al. 2004. Expression of brain-specific angiogenesis inhibitor 3 (BAI-3) in normal brain and implications for BAI-3 in ischemia-induced brain angiogenesis and malignant glioma. *FEBS Lett.* 569: 307-316.

CHROMOSOMAL LOCATION

Genetic locus: BAI2 (human) mapping to 1p35.2; Bai2 (mouse) mapping to 4 D2.2.

SOURCE

BAI-2 (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of BAI-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-33464 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

BAI-2 (T-20) is recommended for detection of BAI-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

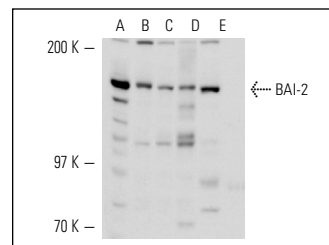
BAI-2 (T-20) is also recommended for detection of BAI-2 in additional species, including equine and canine.

Suitable for use as control antibody for BAI-2 siRNA (h): sc-45210, BAI-2 siRNA (m): sc-45211, BAI-2 shRNA Plasmid (h): sc-45210-SH, BAI-2 shRNA Plasmid (m): sc-45211-SH, BAI-2 shRNA (h) Lentiviral Particles: sc-45210-V and BAI-2 shRNA (m) Lentiviral Particles: sc-45211-V.

Molecular Weight of BAI-2: 171 kDa.

Positive Controls: T98G cell lysate: sc-2294, EOC 20 whole cell lysate: sc-364187 or U-87 MG cell lysate: sc-2411.

DATA



BAI-2 (T-20): sc-33464. Western blot analysis of BAI-2 expression in C6 (A), U-87 MG (B), T98G (C), SH-SY5Y (D) and EOC 20 (E) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **BAI-2 (6A12): sc-517130**, our highly recommended monoclonal alternative to BAI-2 (T-20).