

BONO1 (T-14): sc-162574

BACKGROUND

BONO1, also known as KAZALD1 (kazal-type serine protease inhibitor domain-containing protein 1), IGFBP-rP10, FKSG28 or FKSG40, is a 304 amino acid secreted extracellular matrix protein that promotes matrix assembly. BONO1 is expressed in developing bones and odontoblasts in teeth, where it plays a role in osteoblast proliferation during bone formation and regeneration. BONO1 is also expressed at high levels in spleen, and is found at lower levels in lung, skin, urinary bladder, brain, tongue, kidney and large intestine. Existing as two alternatively spliced isoforms, BONO1 contains one Kazal-like domain, an IGFBP N-terminal domain and a single Ig-like C2-type (immunoglobulin-like) domain. The gene encoding BONO1 maps to human chromosome 10, which contains over 800 genes and 135 million nucleotides. Cockayne syndrome, Cockayne syndrome and trisomy 10 are associated with defects in chromosome 10.

REFERENCES

- Shibata, Y., et al. 2004. Role of a new member of IGFBP superfamily, IGFBP-rP10, in proliferation and differentiation of osteoblastic cells. *Biochem. Biophys. Res. Commun.* 325: 1194-1200.
- James, M.J., et al. 2004. Bono1: a gene associated with regions of deposition of bone and dentine. *Gene Expr. Patterns* 4: 595-599.
- Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609208. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. *Am. J. Hum. Genet.* 81: 756-767.
- Carter, M.T., et al. 2010. Distal trisomy 10q syndrome: phenotypic features in a child with inverted duplicated 10q25.1-q26.3. *Clin. Dysmorphol.* 19: 140-145.
- Laugel, V., et al. 2010. Mutation update for the CSB/ERCC6 and CSA/ERCC8 genes involved in Cockayne syndrome. *Hum. Mutat.* 31: 113-126.
- Yuan, J., et al. 2010. Isolated trisomy 10 in an infant with acute myeloid leukemia: a case report and review of literature. *Int. J. Clin. Exp. Pathol.* 3: 718-722.

CHROMOSOMAL LOCATION

Genetic locus: KAZALD1 (human) mapping to 10q24.31; Kazald1 (mouse) mapping to 19 C3.

SOURCE

BONO1 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of BONO1 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-162574 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BONO1 (T-14) is recommended for detection of BONO1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

BONO1 (T-14) is also recommended for detection of BONO1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BONO1 siRNA (h): sc-90348, BONO1 siRNA (m): sc-141726, BONO1 shRNA Plasmid (h): sc-90348-SH, BONO1 shRNA Plasmid (m): sc-141726-SH, BONO1 shRNA (h) Lentiviral Particles: sc-90348-V and BONO1 shRNA (m) Lentiviral Particles: sc-141726-V.

Molecular Weight of BONO1: 33 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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