Product datasheet

Anti-Sclerostin antibody ab85799

Overview

Product name
Anti-Sclerostin antibody

Description
Rabbit polyclonal to Sclerostin

Host species
Rabbit

Tested applications
Suitable for: WB, ICC/IF

Species reactivity
Reacts with: Human

Predicted to work with: Mouse, Rat, Cow, Dog, Pig

Immunogen
Synthetic peptide corresponding to Human Sclerostin aa 100-200 conjugated to keyhole limpet haemocyanin.
(Peptide available as ab111680)

Positive control
This antibody gave a positive signal in Human bone tumour tissue lysate.

Properties

Form
Liquid

Storage instructions
Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

Storage buffer
pH: 7.40
Preservative: 0.02% Sodium azide
Constituents: PBS, 1% BSA

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity
Immunogen affinity purified

Clonality
Polyclonal

Isotype
IgG

Applications

Our Abpromise guarantee covers the use of ab85799 in the following tested applications.
Function
Negative regulator of bone growth.

Tissue specificity
Widely expressed at low levels with highest levels in bone, cartilage, kidney, liver, bone marrow and primary osteoblasts differentiated for 21 days.

Involvement in disease
Defects in SOST are the cause of sclerosteosis (SOST) [MIM:269500]; also known as cortical hyperostosis with syndactyly. SOST is an autosomal recessive sclerosing bone dysplasia characterized by a generalized hyperostosis and sclerosis leading to a markedly thickened skull, with mandible, ribs, clavicles and all long bones also being affected. Due to narrowing of the foramina of the cranial nerves, facial nerve palsy, hearing loss and atrophy of the optic nerves can occur. Sclerosteosis is clinically and radiologically very similar to van Buchem disease, mainly differentiated by hand malformations and a large stature in sclerosteosis patients.

Note=A 52 kb deletion downstream of SOST results in SOST transcription suppression and is a cause of van Buchem disease (VBCH) [MIM:239100]; also known as hyperostosis corticalis generalisata. VBCH is an autosomal recessive sclerosing bone dysplasia characterized by endosteal hyperostosis of the mandible, skull, ribs, clavicles, and diaphyses of the long bones. Affected patients present a symmetrically increased thickness of bones, most frequently found as an enlarged jawbone, but also an enlargement of the skull, ribs, diaphysis of long bones, as well as tubular bones of hands and feet. The clinical consequence of increased thickness of the skull include facial nerve palsy causing hearing loss, visual problems, neurological pain, and, very rarely, blindness as a consequence of optic atrophy. Serum alkaline phosphatase levels are elevated.

Sequence similarities
Belongs to the sclerostin family.
Contains 1 CTCK (C-terminal cystine knot-like) domain.

Cellular localization
Secreted.

Images
Anti-Sclerostin antibody (ab85799) at 1 µg/ml + Human bone tumor tissue lysate - total protein (ab29359) at 10 µg

**Secondary**
Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 24 kDa  
**Observed band size:** 28 kDa

**why is the actual band size different from the predicted?**
**Additional bands at:** 150 kDa, 55 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 20 minutes

ICC/IF image of ab85799 stained HepG2 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab85799, 5µg/ml) overnight at +4°C. The secondary antibody (green) was ab96899, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in 4% PFA fixed (10 min) HeLa and MCF7 cells at 5µg/ml.

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