abcam

Product datasheet

Recombinant human Sclerostin protein (Active) ab167702

2 Images

Description

Product name Recombinant human Sclerostin protein (Active)

Biological activity Measured by its binding ability in a functional ELISA. Immobilized ab167702 at 5 μg/mL (100

μL/well) can bind Human LRP-6, Mouse IgG2a Fc Tag with a linear range of 10-78 ng/mL.

Purity > 95 % SDS-PAGE.

Endotoxin level < 1.000 Eu/µg
Expression system HEK 293 cells
Accession Q9BQB4

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence QGWQAFKNDA TEIIPELGEY PEPPPELENN

KTMNRAENGG RPPHHPFETK DVSEYSCREL HFTRYVTDGP CRSAKPVTEL VCSGQCGPAR LLPNAIGRGK WWRPSGPDFR CIPDRYRAQR VQLLCPGGEA PRARKVRLVA SCKCKRLTRF HNQSELKDFG TEAARPOKGR KPRPRARSAK

ANQAELENAY

Predicted molecular weight 22 kDa including tags

Amino acids 24 to 213

Tags His tag N-Terminus

Specifications

Our <u>Abpromise guarantee</u> covers the use of ab167702 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications ELISA

SDS-PAGE

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Form Lyophilized

Additional notes This product is stable after storage at:

-20°C to -70°C for 12 months in lyophilized state;

-70°C for 3 months under sterile conditions after reconstitution.

Preparation and Storage

Stability and Storage Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.40

Constituents: 94% PBS, 5% Trehalose

This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution Reconstitute with sterile deionized water to a concentration of 400 µg/ml.

General Info

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 osteeoblasts 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

 $\label{lem:continuous} \mbox{differentiated by hand malformations and a large stature in sclerosteosis patients.}$

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

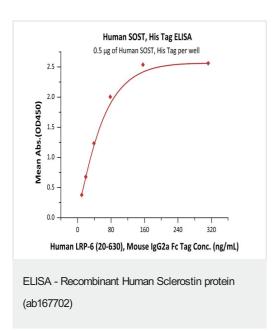
elevated.

Sequence similarities Belongs to the sclerostin family.

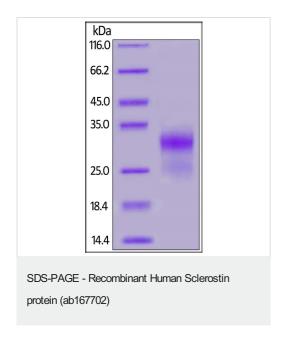
Contains 1 CTCK (C-terminal cystine knot-like) domain.

Cellular localization Secreted.

Images



Immobilized ab167702 at 5 μ g/mL (100 μ L/well) can bind Human LRP-6, Mouse IgG2a Fc Tag with a linear range of 10-78 ng/mL.



SDS-PAGE of reduced ab167702 stained overnight with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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