

Product datasheet

Anti-Sclerostin antibody ab63097

★★★★★ 5 Abreviews 10 References 7 Images

Overview

Product name	Anti-Sclerostin antibody
Description	Rabbit polyclonal to Sclerostin
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Sheep, Human
Immunogen	Synthetic peptide corresponding to Human Sclerostin aa 12-42 (N terminal) conjugated to Keyhole Limpet Haemocyanin (KLH). Database link: 50964
Positive control	WB: HeLa cell lysate. Mouse liver, mouse lung, rat kidney and human kidney tissue lysates. IHC-P: Human breast carcinoma tissue.

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	Preservative: 0.09% Sodium azide Constituent: PBS
Purity	Protein A purified
Purification notes	This antibody is purified through a protein A column, followed by peptide affinity purification.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab63097** in the following tested applications.

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

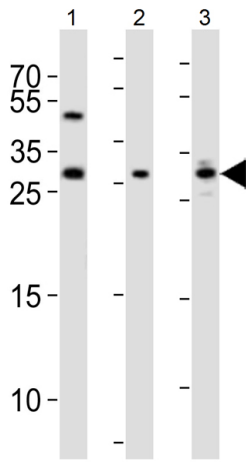
Application	Abreviews	Notes
WB	★★★★★	1/1000. Detects a band of approximately 24 kDa (predicted molecular weight: 24 kDa).

Application	Abreviews	Notes
IHC-P	★★★★★	1/10 - 1/50.

Target

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	<p>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.</p> <p>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.</p>
Sequence similarities	<p>Belongs to the sclerostin family.</p> <p>Contains 1 CTCK (C-terminal cystine knot-like) domain.</p>
Cellular localization	Secreted.

Images



Western blot - Anti-Sclerostin antibody (ab63097)

All lanes : Anti-Sclerostin antibody (ab63097)
at 1/1000 dilution

Lane 1 : Mouse liver tissue lysate

Lane 2 : Mouse lung tissue lysate

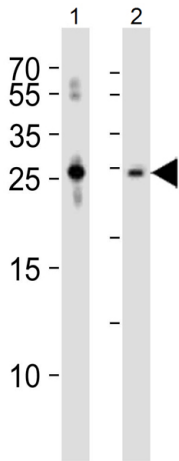
Lane 3 : Rat kidney tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : HRP-conjugated goat anti-rabbit
IgG (H+L) at 1/10000 dilution

Predicted band size: 24 kDa



Western blot - Anti-Sclerostin antibody (ab63097)

All lanes : Anti-Sclerostin antibody (ab63097)
at 1/1000 dilution

Lane 1 : Human kidney tissue lysate

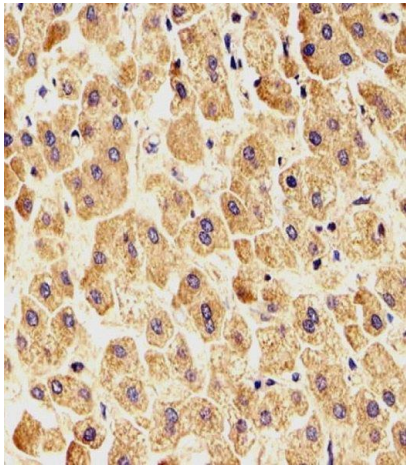
Lane 2 : Mouse lung tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

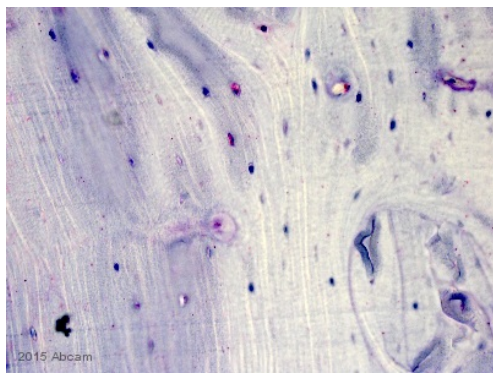
All lanes : HRP-conjugated goat anti-rabbit
IgG (H+L) at 1/10000 dilution

Predicted band size: 24 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sclerostin antibody (ab63097)

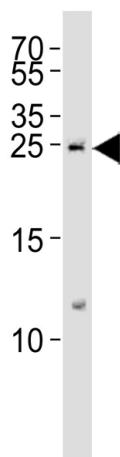
ab63097 staining Sclerostin in Human liver tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 30 minutes at room temperature; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. An undiluted Biotin-conjugated Goat polyclonal was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sclerostin antibody (ab63097)

Image courtesy of an anonymous Abreview.

Immunohistochemical analysis of PFA-fixed paraffin-embedded rat femoral tissue, labelling sclerostin with ab63097 at a dilution of 1/50 incubated for 13 hours at 4°C in 1% BSA in TBS. Heat mediated antigen retrieval was performed via Tris-EDTA pH 9.0. Blocking was via ab93695 ABC kit incubated at 1% for 20 minutes at room temperature. A secondary was not used, but ab93695 detection kit was used for signal amplification.



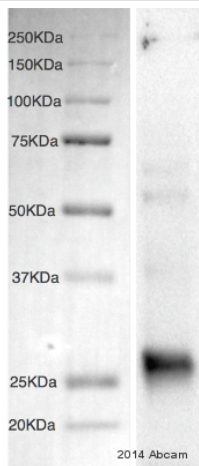
Western blot - Anti-Sclerostin antibody (ab63097)

Anti-Sclerostin antibody (ab63097) at 1/1000 dilution + HeLa cell lysate at 35 µg

Secondary

HRP-conjugated goat anti-rabbit IgG (H+L) at 1/5000 dilution

Predicted band size: 24 kDa



Western blot - Anti-Sclerostin antibody (ab63097)

This image is courtesy of an Abreview submitted by Helder Fonseca

Anti-Sclerostin antibody (ab63097) at 1/500 dilution + Rat bone (tibia) whole tissue lysate at 36 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97069) at 1/2000 dilution

Developed using the ECL technique.

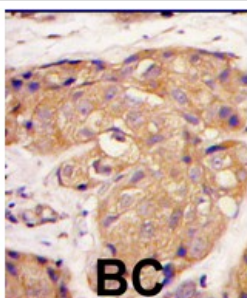
Performed under reducing conditions.

Predicted band size: 24 kDa

Observed band size: 24 kDa

Additional bands at: 55 kDa (possible non-specific binding), 60 kDa (possible non-specific binding)

Exposure time: 10 minutes



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sclerostin antibody (ab63097)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labelling Sclerostin with ab63097. Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hours at 38°C; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A peroxidase-conjugated goat anti-rabbit polyclonal (ready to use) was used as the secondary antibody.

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