

Anti-Asporin antibody ab31303

★★★★☆ [3 Abreviews](#) [8 References](#) [3 图像](#)

概述

产品名称	Anti-Asporin抗体
描述	山羊多克隆抗体to Asporin
宿主	Goat
经测试应用	适用于: WB, ICC
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide corresponding to Human Asporin aa 150-250 (internal sequence). Run BLAST with ExPASy Run BLAST with NCBI
阳性对照	WB: Human tonsil, human uterus, mouse and rat skeletal muscle tissue lysates. ICC: HeLa cells.
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 99% Tris buffered saline, 0.5% BSA
纯度	Immunogen affinity purified
纯化说明	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide
克隆	多克隆
同种型	IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab31303于以下的经测试应用

“应用说明”部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★☆ (2)	Use a concentration of 1 - 3 µg/ml. Detects a band of approximately 40 kDa (predicted molecular weight: 43 kDa). 1 hour primary incubation is recommended for this product.
ICC		Use at an assay dependent concentration.

靶标

功能	<p>Negatively regulates periodontal ligament (PDL) differentiation and mineralization to ensure that the PDL is not ossified and to maintain homeostasis of the tooth-supporting system. Inhibits BMP2-induced cytodifferentiation of PDL cells by preventing its binding to BMPR1B/BMP type-1B receptor, resulting in inhibition of BMP-dependent activation of SMAD proteins (By similarity). Critical regulator of TGF-beta in articular cartilage and plays an essential role in cartilage homeostasis and osteoarthritis (OA) pathogenesis. Negatively regulates chondrogenesis in the articular cartilage by blocking the TGF-beta/receptor interaction on the cell surface and inhibiting the canonical TGF-beta/Smad signal. Binds calcium and plays a role in osteoblast-driven collagen biomineralization activity.</p>
组织特异性	<p>Higher levels in osteoarthritic articular cartilage, aorta, uterus. Moderate expression in small intestine, heart, liver, bladder, ovary, stomach, and in the adrenal, thyroid, and mammary glands. Low expression in trachea, bone marrow, and lung. Co-localizes with TGFB1 in chondrocytes within osteoarthritic (OA) lesions of articular cartilage.</p>
疾病相关	<p>Genetic variations in ASPN are associated with susceptibility to osteoarthritis type 3 (OS3) [MIM:607850]; also known as osteoarthritis of knee/hip. Osteoarthritis is a degenerative disease of the joints characterized by degradation of the hyaline articular cartilage and remodeling of the subchondral bone with sclerosis. Clinical symptoms include pain and joint stiffness often leading to significant disability and joint replacement. Note=Susceptibility to osteoarthritis is conferred by a triplet repeat expansion polymorphism. ASPN allele having 14 aspartic acid repeats in the N-terminal region of the protein (D14), is overrepresented relative to the common allele having 13 aspartic acid repeats (D13). The frequency of the D14 allele increases with disease severity. The D14 allele is also overrepresented in individuals with hip osteoarthritis.</p> <p>Defects in ASPN are a cause of susceptibility to intervertebral disk disease (IDD) [MIM:603932]. A common musculo-skeletal disorder caused by degeneration of intervertebral disks of the lumbar spine. It results in low-back pain and unilateral leg pain. Note=Susceptibility to intervertebral disk disease, particularly lumbar disk degeneration, is conferred by a triplet repeat expansion polymorphism. ASPN allele having 14 aspartic acid repeats in the N-terminal region of the protein (D14), is associated with the disorder in some populations (PubMed:18304494).</p>
序列相似性	<p>Belongs to the small leucine-rich proteoglycan (SLRP) family. SLRP class I subfamily. Contains 11 LRR (leucine-rich) repeats. Contains 1 LRRNT domain.</p>
结构域	<p>The LRR 5 repeat can inhibit BMP2-induced cytodifferentiation and may be involved in the interaction with BMP2 (By similarity). The repeats LRR 10, LRR 11 and LRR 12 are involved in binding type I collagen. The poly-Asp region is involved in binding calcium.</p>
翻译后修饰	<p>There is no serine/glycine dipeptide sequence expected for the attachment of O-linked</p>

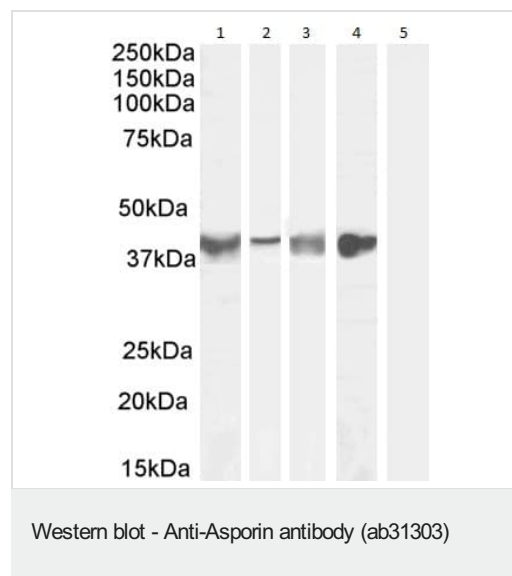
glycosaminoglycans and this is probably not a proteoglycan. The O-linked polysaccharide on 54-Ser is probably the mucin type linked to GalNAc.

The N-linked glycan at Asn-282 is composed of variable structures of GlcNAc, mannose, fucose, HexNAc and hexose.

细胞定位

Secreted > extracellular space > extracellular matrix.

图片



Lanes 1 & 3 & 5 : Anti-Asporin antibody (ab31303) at 0.1 $\mu\text{g/ml}$

Lane 2 : Anti-Asporin antibody (ab31303) at 0.3 $\mu\text{g/ml}$

Lane 4 : Anti-Asporin antibody (ab31303) at 1 $\mu\text{g/ml}$

Lane 1 : Human tonsil tissue lysate

Lane 2 : Human uterus tissue lysate

Lane 3 : Mouse skeletal muscle tissue lysate

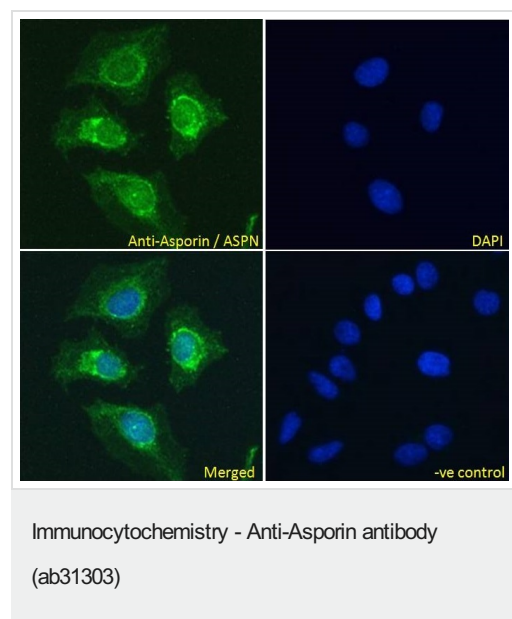
Lane 4 : Rat skeletal muscle tissue lysate

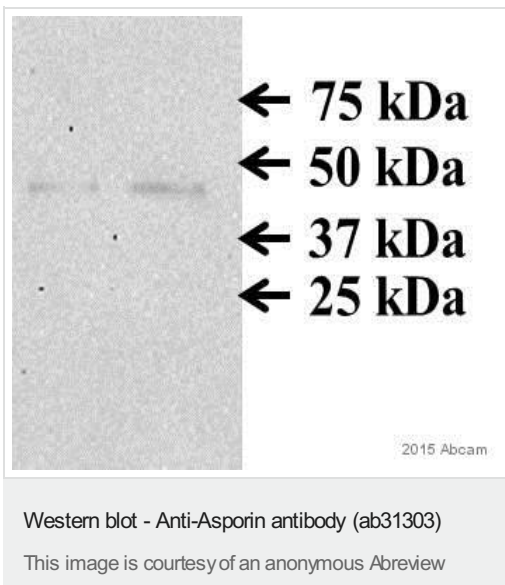
Lane 5 : Human cerebellum tissue lysate

Lysates/proteins at 35 μg per lane.

Predicted band size: 43 kDa

35 μg protein in RIPA buffer. Detected by chemiluminescence.





All lanes : Anti-Asporin antibody (ab31303) at 1/1000 dilution

All lanes : Human osteosarcoma cell line whole lysate

Lysates/proteins at 30 µg per lane.

Secondary

All lanes : HRP-conjugated anti-goat IgG polyclonal at 1/2000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 43 kDa

Observed band size: 42 kDa

Exposure time: 1 minute

Blocked with 5% milk for 1 hour at 27°C.

Incubated with the primary antibody diluted in blocking buffer for 12 hours at 4°C.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors