abcam

Product datasheet

Anti-Syntrophin antibody [1351] ab11425

★★★★★ 3 Abreviews 24 References 7 图像

概述

产品名称 Anti-Syntrophin抗体[1351]

描述 小鼠单克隆抗体[1351] to Syntrophin

宿主 Mouse

特异性 ab11425 is known to be reactive with the alpha 1, beta 1 and beta 2 subunits of syntrophin.

经测试应用 适用于: ICC/IF, IP, WB, Flow Cyt

种属反应性 与反应: Mouse, Rat, Human

预测可用于: Fish 🕰

免疫原 Full length native protein (purified) corresponding to Syntrophin. Whole purified syntrophin from

Torpedo californica electric organ postsynaptic membrane.

表位 ab11425 is directed against an epitope within the PDZ domain of syntrophin.

阳性对照 WB: U-87MG, PC-3, and HeLa cell lysates.

常规说明 ab11425 is seen as the "gold standard" for syntrophin assessment.

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.

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

性能

形式 Liquid

存放说明 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.

存储溶液 Preservative: 0.05% Sodium azide

Constituents: PBS, 1% BSA

纯度 Immunogen affinity purified

Primary antibody说明 ab11425 is seen as the "gold standard" for syntrophin assessment.

克隆 单克隆

1

克隆编号 1351 **同种型** IgG1

应用

The Abpromise guarantee Abpromise™承诺保证使用ab11425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
ICC/IF	★★★★ (1)	Use a concentration of 10 μg/ml.
IP		Use a concentration of 5 µg/ml.
WB	****(2)	Use a concentration of 0.2 µg/ml. Detects a band of approximately 58 kDa (predicted molecular weight: 54 kDa).
Flow Cyt		Use 0.5µg for 10 ⁶ cells. ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.

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功能 Adapter protein that binds to and probably organizes the subcellular localization of a variety of

membrane proteins. May link various receptors to the actin cytoskeleton and the extracellular matrix via the dystrophin glycoprotein complex. Plays an important role in synapse formation and in the organization of UTRN and acetylcholine receptors at the neuromuscular synapse. Binds to

phosphatidylinositol 4,5-bisphosphate.

组织特异性 High expression in skeletal muscle and heart. Low expression in brain, pancreas, liver, kidney and

lung. Not detected in placenta.

疾病相关 Long QT syndrome 12 (LQT12) [MIM:612955]: A heart disorder characterized by a prolonged QT

interval on the ECG and polymorphic ventricular arrhythmias. They cause syncope and sudden death in response to exercise or emotional stress, and can present with a sentinel event of sudden cardiac death in infancy. Note=The disease is caused by mutations affecting the gene

represented in this entry.

序列相似性 Belongs to the syntrophin family.

Contains 1 PDZ (DHR) domain.

Contains 2 PH domains.

Contains 1 SU (syntrophin unique) domain.

结**构域** The PH 1 domain mediates the oligomerization in a calcium dependent manner, and the

association with the phosphatidylinositol 4,5-bisphosphate.

The PDZ domain binds to the last three or four amino acids of ion channels and receptor proteins. The association with dystrophin or related proteins probably leaves the PDZ domain available to

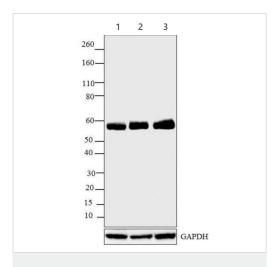
recruit proteins to the membrane.

The SU domain binds calmodulin in a calcium-dependent manner.

翻译后修饰 Phosphorylated by CaM-kinase II. Phosphorylation may inhibit the interaction with DMD.

细胞定位 Cell membrane > sarcolemma. Cell junction. Cytoplasm > cytoskeleton. In skeletal muscle, it

图片



Western blot - Anti-Syntrophin antibody [1351] (ab11425)

All lanes: Anti-Syntrophin antibody [1351] (ab11425) at 1 µg/ml

Lane 1 : U-87 MG (human glioblastoma-astrocytoma epithelial cell line) whole cell lysate

Lane 2 : PC-3 (human prostate adenocarcinoma cell line) whole cell lysate

Lane 3 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lysates/proteins at 30 µg per lane.

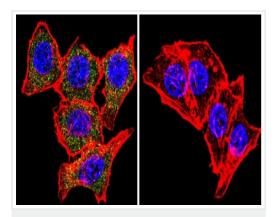
Secondary

All lanes: Goat anti-Mouse IgG (H+L) (HRP) at 1/4000 dilution

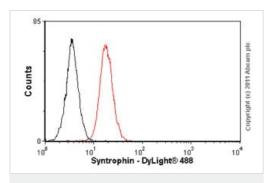
Developed using the ECL technique.

Predicted band size: 54 kDa **Observed band size:** 54 kDa

Protein samples were electrophoresed by SDS-PAGE using a 12% Bis-Tris gel. Resolved proteins were then transferred onto a nitrocellulose membrane. The membrane was probed with the relevant primary and secondary antibodies following blocking with 5% skimmed milk.



Immunocytochemistry/ Immunofluorescence - Anti-Syntrophin antibody [1351] (ab11425) Immunocytochemistry/Immunofluorescence analysis of HeLa cells labeling Syntrophin (green) with ab11425 at 1/20. F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue). Cells were fixed with formaldehyde and incubated with the primary antibody overnight at 4°C. A DyLight 488-conjugated secondary antibody was used. 60X magnification. Right - negative control.



Flow Cytometry - Anti-Syntrophin antibody [1351] (ab11425)



Western blot - Anti-Syntrophin antibody [1351] (ab11425)

Overlay histogram showing SH-SY5Y cells stained with ab11425 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab11425, 0.5µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG1 [ICIGG1] (ab91353, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in SH-SY5Y cells fixed with 80% methanol (5 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.

All lanes: Anti-Syntrophin antibody [1351] (ab11425) at 5 µg/ml

Lane 1 : Human skeletal muscle tissue lysate - total protein (ab29330)

Lane 2 : Skeletal Muscle (Rat) Tissue Lysate

Lane 3 : Skeletal Muscle (Mouse) Tissue Lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat polyclonal Secondary Antibody to Mouse IgG - H&L (HRP), pre-adsorbed at 1/5000 dilution

Developed using the ECL technique.

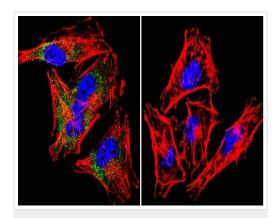
Performed under reducing conditions.

Predicted band size: 54 kDa Observed band size: 58 kDa

Additional bands at: 26 kDa, 42 kDa. We are unsure as to the

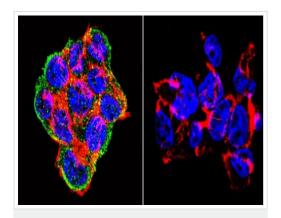
identity of these extra bands.

Exposure time: 12 minutes



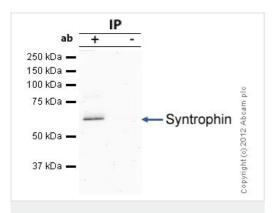
Immunocytochemistry/ Immunofluorescence - Anti-Syntrophin antibody [1351] (ab11425)

Immunocytochemistry/Immunofluorescence analysis of A2058 cells labeling Syntrophin (green) with ab11425 at 1/20. F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue). Cells were fixed with formaldehyde and incubated with the primary antibody overnight at 4°C. A DyLight 488-conjugated secondary antibody was used. 60X magnification. Right - negative control.



Immunocytochemistry/ Immunofluorescence - Anti-Syntrophin antibody [1351] (ab11425)

Immunocytochemistry/Immunofluorescence analysis of 293 cells labeling Syntrophin (green) with ab11425 at 1/20. F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue). Cells were fixed with formaldehyde and incubated with the primary antibody overnight at 4°C. A DyLight 488-conjugated secondary antibody was used. 60X magnification. Right - negative control.



Immunoprecipitation - Anti-Syntrophin antibody [1351] (ab11425)

Syntrophin was immunoprecipitated using 0.5mg Mouse Skeletal Muscle tissue lysate, $5\mu g$ of Mouse monoclonal to Syntrophin and $50\mu l$ of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, Mouse Skeletal Muscle tissue lysate lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of $40\mu l$ SDS loading buffer and incubated for 10min at $70^{o}C$; $10\mu l$ of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab11425.

Secondary: Goat polyclonal to mouse IgG light chain specific (HRP) at 1/5000 dilution.

Band: 58kDa; Syntrophin

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