abcam

Product datasheet

Anti-Smad1 (phospho S463 + S465) antibody [EPR20662-20] - BSA and Azide free ab228457

重组 RabMAb

4 图像

概述

产品名称	Anti-Smad1 (phospho S463 + S465)抗体[EPR20662-20] - BSA and Azide free
描述	兔单克隆抗体[EPR20662-20] to Smad1 (phospho S463 + S465) - BSA and Azide free
宿主	Rabbit
特异性	Based on sequence homology this antibody also reacts with Smad5 (phospho S463/S465) and Smad9 (phospho S465/S467).
经测试应用	**适用于:** IP, WB, ICC/IF, Dot blot
种属反应性	**与反应:** Mouse, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	ICC/IF: NIH3T3 cells FBS-deprived overnight before treatment with 50 ng/ml hBMP2 for 30min.
常规说明	ab228457 is the carrier-free version of **ab226821**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.2 Constituent: PBS
无载体	**是**
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR20662-20
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab228457于以下的经测试应用**

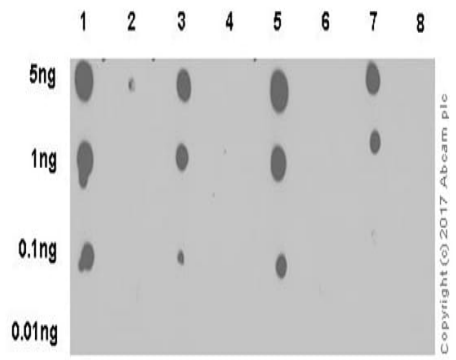
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 60 kDa (predicted molecular weight: 52 kDa).
ICC/IF		Use at an assay dependent concentration.
Dot blot		Use at an assay dependent concentration.

靶标

功能	Transcriptional modulator activated by BMP (bone morphogenetic proteins) type 1 receptor kinase. SMAD1 is a receptor-regulated SMAD (R-SMAD). SMAD1/OAZ1/PSMB4 complex mediates the degradation of the CREBBP/EP300 repressor SNIP1.
组织特异性	Ubiquitous. Highest expression seen in the heart and skeletal muscle.
序列相似性	Belongs to the dwarfin/SMAD family. Contains 1 MH1 (MAD homology 1) domain. Contains 1 MH2 (MAD homology 2) domain.
翻译后修饰	Phosphorylated on serine by BMP type 1 receptor kinase. Ubiquitin-mediated proteolysis by SMAD-specific E3 ubiquitin ligase SMURF1.
细胞定位	Cytoplasm. Nucleus. Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4. Co-localizes with LEMD3 at the nucleus inner membrane.

图片



Dot Blot - Anti-Smad1 (phospho S463 + S465) antibody [EPR20662-20] - BSA and Azide free (ab228457)

Dot blot analysis of Smad1 (phospho S463 + S465) labeled with **ab226821** at 1/1000 dilution.

Lane 1: Smad1 (phospho S463/S465) peptide;

Lane 2: Smad1 (phospho S463) peptide;

Lane 3: Smad1 (phospho S465) peptide;

Lane 4: Smad1 peptide (not phosphorylated);

Lane 5: Smad5 (phospho S463/S465) peptide;

Lane 6: Smad5 (phospho S463) peptide;

Lane 7: Smad5 (phospho S465) peptide;

Lane 9: Smad5 peptide (not phosphorylated).

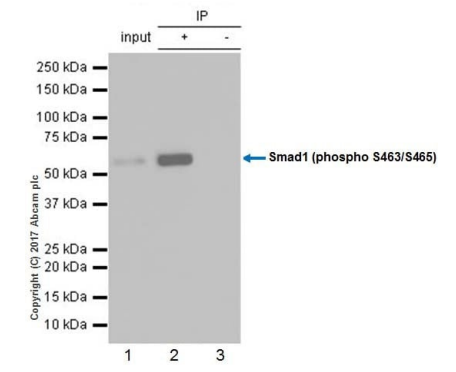
Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution was used as secondary antibody.

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.

Based on sequence homology, this antibody cross-reacts with Smad5 (phospho S463/S465) and Smad9 (phospho S465/S467).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab226821**).



Immunoprecipitation - Anti-Smad1 (phospho S463 + S465) antibody [EPR20662-20] - BSA and Azide free (ab228457)

Smad 1 (phospho S463 + S465) was immunoprecipitated from 0.35 mg NIH/3T3 (mouse embryo fibroblast cell line) grown in serum-free media overnight, then treated with 50 ng/ml BMP2 for 30 minutes, whole cell lysate with **ab226821** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab226821** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

Lane 1: NIH/3T3 grown in serum-free media overnight, then treated with 50 ng/ml BMP2 for 30 minutes, whole cell lysate 10 µg (Input).

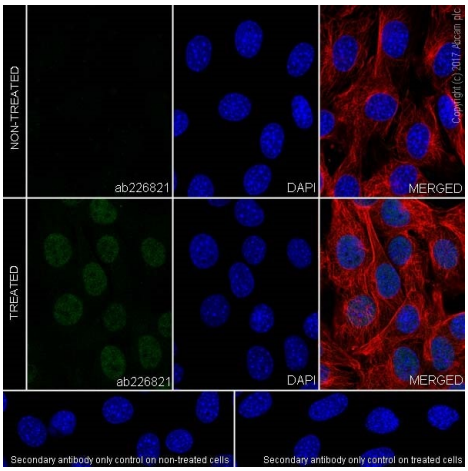
Lane 2: **ab226821** IP in NIH/3T3 grown in serum-free media overnight, then treated with 50 ng/ml BMP2 for 30 minutes, whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab226821** in NIH/3T3 grown in serum-free media overnight, then treated with 50 ng/ml BMP2 for 30 minutes, whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 10 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab226821**).



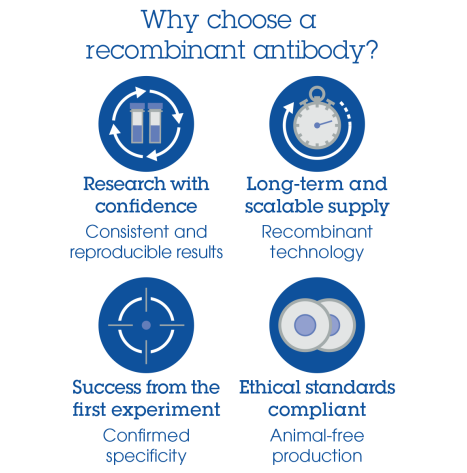
Immunocytochemistry/ Immunofluorescence - Anti-Smad1 (phospho S463 + S465) antibody [EPR20662-20] - BSA and Azide free (ab228457)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (mouse embryo fibroblast cell line) cells labeling Smad1 (phospho S463 + S465) with **ab226821** at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Nuclear staining in hBMP2-treated NIH/3T3 cells. Cells were FBS-deprived overnight before treatment with 50 ng/ml hBMP2 for 30 minutes.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab226821**).



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