# abcam

### Product datasheet

## Anti-Caveolin-3 antibody ab87770

1 References 3 图像

概述

产**品名称** Anti-Caveolin-3抗体

描述 山羊多克隆抗体to Caveolin-3

**宿主** Goat

经测试应用 **适用于:** WB, IHC-P

种属反应性 与反应: Mouse, Rat, Human, Pig

预测可用于: Cow, Dog 🔷

免疫原 Synthetic peptide corresponding to Human Caveolin-3 aa 5-18 (N terminal) (Cysteine residue).

Sequence:

**EHTDLEAQIVKDIH** 

Database link: P56539

Run BLAST with
Run BLAST with

阳性对照 Recombinant Human Caveolin-3 protein (<u>ab114264</u>) can be used as a positive control in WB.

Human, mouse and rat heart lysates.

常规说明

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. 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: 0.5% BSA, Tris buffered saline

纯**度** Immunogen affinity purified

纯**化说明** Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity

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chromatography using the immunizing peptide.

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab87770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		Use a concentration of 0.1 - 0.3 µg/ml. Detects a band of approximately 23 kDa (predicted molecular weight: 17 kDa). 1 hour primary incubation is recommended for this product.
IHC-P		Use a concentration of 3 - 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

#### 靶标

#### 功能

组织特异性 疾病相关 May act as a scaffolding protein within caveolar membranes. Interacts directly with G-protein alpha subunits and can functionally regulate their activity. May also regulate voltage-gated potassium channels. Plays a role in the sarcolemma repair mechanism of both skeletal muscle and cardiomyocytes that permits rapid resealing of membranes disrupted by mechanical stress.

Expressed predominantly in muscle.

Defects in CAV3 are the cause of limb-girdle muscular dystrophy type 1C (LGMD1C) [MIM:607801]. LGMD1C is a myopathy characterized by calf hypertrophy and mild to moderate proximal muscle weakness. LGMD1C inheritance can be autosomal dominant or recessive. Defects in CAV3 are a cause of hyperCKmia (HYPCK) [MIM:123320]. It is a disease characterized by persistent elevated levels of serum creatine kinase without muscle weakness. Defects in CAV3 are a cause of rippling muscle disease (RMD) [MIM:606072]. RMD is a rare disorder characterized by mechanically triggered contractions of skeletal muscle. In RMD, mechanical stimulation leads to electrically silent muscle contractions that spread to neighboring fibers that cause visible ripples to move over the muscle.

Defects in CAV3 are a cause of cardiomyopathy familial hypertrophic (CMH) [MIM:192600]; also designated FHC or HCM. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death.

Defects in CAV3 are the cause of long QT syndrome type 9 (LQT9) [MIM:611818]. Long QT syndromes are heart disorders characterized by a prolonged QT interval on the ECG and polymorphic ventricular arrhythmias. They cause syncope and sudden death in response to excercise or emotional stress. They can present with a sentinel event of sudden cardiac death in infancy.

Defects in CAV3 can be a cause of sudden infant death syndrome (SIDS) [MIM:272120]. SIDS is

the sudden death of an infant younger than 1 year that remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of clinical history. Pathophysiologic mechanisms for SIDS may include respiratory dysfunction, cardiac dysrhythmias, cardiorespiratory instability, and inborn errors of metabolism, but definitive pathogenic mechanisms precipitating an infant sudden death remain elusive. Long QT syndromes-associated mutations can be responsible for some SIDS cases.

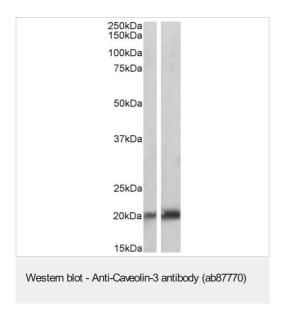
序列相似性

Belongs to the caveolin family.

细胞定位

Golgi apparatus membrane. Cell membrane. Membrane > caveola. Potential hairpin-like structure in the membrane. Membrane protein of caveolae.

#### 图片



All lanes: Anti-Caveolin-3 antibody (ab87770) at 0.1 µg/ml

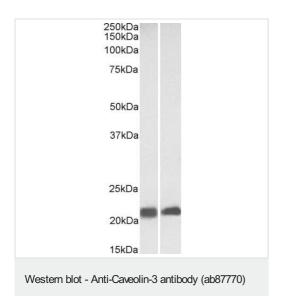
Lane 1: pig skeletal muscle tissue lysate

Lane 2: pig heart tissue lysate

Lysates/proteins at 35 µg per lane.

Predicted band size: 17 kDa Observed band size: 20 kDa

Detected by chemiluminescence.



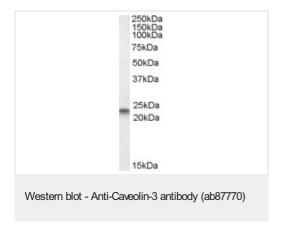
All lanes: Anti-Caveolin-3 antibody (ab87770) at 0.3 µg/ml

Lane 1: mouse heart tissue lysate Lane 2: rat heart tissue lysate

Lysates/proteins at 35 µg per lane.

Predicted band size: 17 kDa Observed band size: 20 kDa

Detected by chemiluminescence.



Anti-Caveolin-3 antibody (ab87770) at 0.3  $\mu$ g/ml + human heart lysate in RIPA buffer at 35  $\mu$ g

Developed using the ECL technique.

**Predicted band size:** 17 kDa **Observed band size:** 23 kDa

Exposure time: 1 hour

Detected by chemiluminescence.

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

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