abcam

Product datasheet

Anti-SERCA2 ATPase antibody [IID8] - BSA and Azide free ab255960

リコンビナント

画像数 4

製品の概要

製品名	Anti-SERCA2 ATPase antibody [IID8] - BSA and Azide free
製品の詳細	Mouse monoclonal [IID8] to SERCA2 ATPase - BSA and Azide free
由来種	Mouse
特異性	Detects Sarcoplasmic or Endoplasmic Reticulum Calcium 2 (SERCA2) ATPase. This antibody does not discriminate between the two isoforms.By Western blot, this antibody detects an ~110 kDa protein representing SERCA2 ATPase from canine skeletal muscle triad preparations. Immunofluorescence staining of SECRA2 ATPase in rabbit skeletal muscle results in strong labeling of the entire type I (slow) myofiber consistent with sarcoplasmic reticulum localization.This antibody is not recommended for Western blot detection of rat SERCA2.
アプリケーション	**適用あり:** WB, IHC-P
種交差性	**交差種:** Human
免疫原	Full length native protein (purified). This information is considered to be commercially sensitive.
ポジティブ・コントロール	IHC-P: Human skeletal muscle and cardiac muscle tissue. WB: Human skeletal muscle. HeLa, HepG2, A549 and A673 whole cell lysate.
特記事項	ab255960 is the carrier-free version of **ab2817**. This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. 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.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.2 Constituent: PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	IID8
アイソタイプ	IgG1

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab255960の使用に適用されます**

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/2500. Detects a band of approximately 110 kDa (predicted molecular weight: 115 kDa).
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

ターゲット情報

機能	This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen. Isoform 2 is involved in the regulation of the contraction/relaxation cycle.
組織特異性	Isoform 1 is widely expressed in smooth muscle and nonmuscle tissues such as in adult skin epidermis, with highest expression in liver, pancreas and lung, and intermediate expression in brain, kidney and placenta. Also expressed at lower levels in heart and skeletal muscle. Isoforms 2 and 3 are highly expressed in the heart and slow twitch skeletal muscle. Expression of isoform 3 is predominantly restricted to cardiomyocytes and in close proximity to the sarcolemma. Both isoforms are mildly expressed in lung, kidney, liver, pancreas and placenta. Expression of isoform 3 is amplified during monocytic differentiation and also observed in the fetal heart.
関連疾患	Defects in ATP2A2 are a cause of acrokeratosis verruciformis (AKV) [MIM:101900]; also known as Hopf disease. AKV is a localized disorder of keratinization, which is inherited as an autosomal dominant trait. Its onset is early in life with multiple flat-topped, flesh-colored papules on the hands and feet, punctate keratoses on the palms and soles, with varying degrees of nail involvement. The histopathology shows a distinctive pattern of epidermal features with hyperkeratosis, hypergranulosis, and acanthosis together with papillomatosis. These changes are frequently associated with circumscribed elevations of the epidermis that are said to resemble church

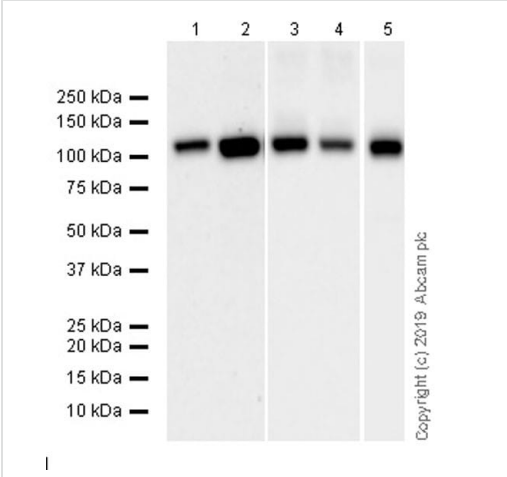
spires. There are no features of dyskeratosis or acantholysis, the typical findings in lesions of Darier disease.
Defects in ATP2A2 are the cause of Darier disease (DD) [MIM:124200]; also known as Darier-White disease (DAR). DD is an autosomal dominantly inherited skin disorder characterized by loss of adhesion between epidermal cells (acantholysis) and abnormal keratinization. Patients with mild disease may have no more than a few scattered keratotic papules or subtle nail changes, whereas those with severe disease are handicapped by widespread malodorous keratotic plaques. In a few families, neuropsychiatric abnormalities such as mild mental retardation, schizophrenia, bipolar disorder and epilepsy have been reported. Stress, UV exposure, heat, sweat, friction, and oral contraception exacerbate disease symptoms. Prevalence has been estimated at 1 in 50000. Clinical variants of DD include hypertrophic, vesicobullous, hypopigmented, cornifying, zosteriform or linear, acute and comedonal subtypes. Comedonal Darier disease (CDD) is characterized by the coexistence of acne-like comedonal lesions with typical Darier hyperkeratotic papules on light-exposed areas. At histopathologic level, CDD differs from classic DD in the prominent follicular involvement and the presence of greatly elongated dermal villi.

配列類似性 Belongs to the cation transport ATPase (P-type) (TC 3.A.3) family. Type IIA subfamily.

翻訳後修飾 Nitrated under oxidative stress. Nitration on the two tyrosine residues inhibits catalytic activity.

細胞内局在 Endoplasmic reticulum membrane. Sarcoplasmic reticulum membrane.

画像



Western blot - Anti-SERCA2 ATPase antibody [IID8] - BSA and Azide free (ab255960)

All lanes : Anti-SERCA2 ATPase antibody [IID8] (**ab2817**) at 1/1000 dilution

Lane 1 : HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate
Lane 2 : HepG2 (human hepatocellular carcinoma epithelial cell), whole cell lysate
Lane 3 : A549 (human lung carcinoma epithelial cell), whole cell lysate
Lane 4 : A673 (human muscle Ewing's Sarcoma), whole cell lysate
Lane 5 : Human skeletal muscle

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at 1/100000 dilution

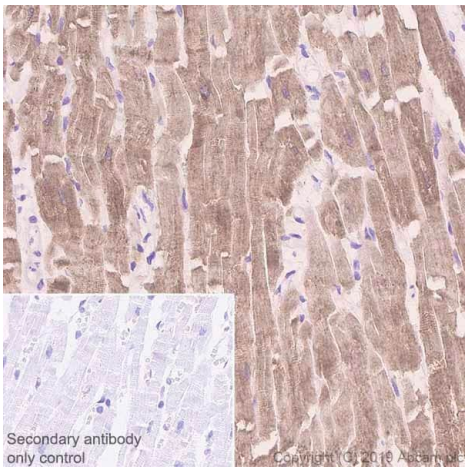
Predicted band size: 115 kDa
Observed band size: 110 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure times: Lanes 1-2: 92 seconds; Lanes 3-4: 10 seconds; Lane 5: 3 seconds.

Samples are non-boiled as boiling may cause protein aggregates.

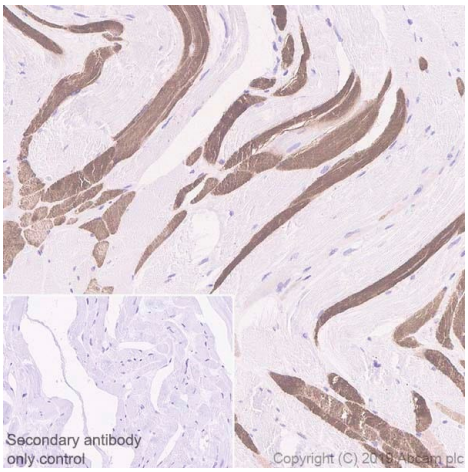
This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab2817**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SERCA2 ATPase antibody [IID8] - BSA and Azide free (ab255960)

Immunohistochemical analysis of paraffin-embedded human cardiac muscle tissue labeling SERCA2 ATPase with **ab2817** at 1/4000 dilution, followed by ready to use Goat Anti-Mouse IgG H&L (HRP polymer) (**ab214879**). Cytoplasmic staining on human cardiac muscle tissue is observed. Counterstained with hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, followed by ready to use Goat Anti-Mouse IgG H&L (HRP polymer) (**ab214879**).
Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab2817**).



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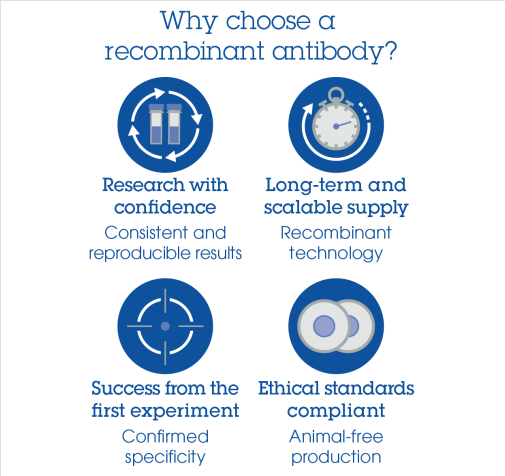

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