

## Product datasheet

## Anti-Caldesmon antibody [SPM168], prediluted ab53917

## 画像数 1

## 製品の概要

製品名	Anti-Caldesmon antibody [SPM168], prediluted
製品の詳細	Mouse monoclonal [SPM168] to Caldesmon, prediluted
由来種	Mouse
特異性	ab53917 reacts with Caldesmon.
アプリケーション	適用あり: IHC-P
種交差性	交差種: Human
免疫原	Crude human uterus extract.
ポジティブ・コントロール	Uterus tissue.

## 製品の特性

製品の状態	Prediluted
保存方法	Shipped at 4°C. Store at +4°C.
パッファー	Preservative: 0.1% Sodium Azide Constituents: PBS, BSA, pH 7.4
精製度	Protein G purified
ポリ/モノ	モノクローナル
クローン名	SPM168
アイソタイプ	IgG1
軽鎖の種類	kappa

## アプリケーション

Our Abpromise guarantee covers the use of ab53917 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

## アプリケーション

## Abreviews

## 特記事項

IHC-P

## 追加情報

IHC-P: Ready to use for 30 min at room temperature. Staining of formalin-fixed tissues requires

boiling tissue sections in 10mM citrate buffer, pH 6.0 for 10 min followed by cooling at room temperature for 20 min.

Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

## ターゲット情報

### 機能

Actin- and myosin-binding protein implicated in the regulation of actomyosin interactions in smooth muscle and nonmuscle cells (could act as a bridge between myosin and actin filaments). Stimulates actin binding of tropomyosin which increases the stabilization of actin filament structure. In muscle tissues, inhibits the actomyosin ATPase by binding to F-actin. This inhibition is attenuated by calcium-calmodulin and is potentiated by tropomyosin. Interacts with actin, myosin, two molecules of tropomyosin and with calmodulin. Also play an essential role during cellular mitosis and receptor capping.

### 組織特異性

High-molecular-weight caldesmon (isoform 1) is predominantly expressed in smooth muscles, whereas low-molecular-weight caldesmon (isoforms 2, 3, 4 and 5) are widely distributed in non-muscle tissues and cells. Not expressed in skeletal muscle or heart.

### 配列類似性

Belongs to the caldesmon family.

### ドメイン

The N-terminal part seems to be a myosin/calmodulin-binding domain, and the C-terminal a tropomyosin/actin/calmodulin-binding domain. These two domains are separated by a central helical region in the smooth-muscle form.

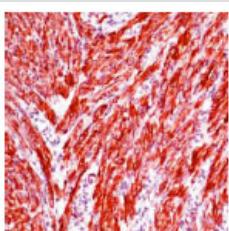
### 翻訳後修飾

In non-muscle cells, phosphorylation by CDK1 during mitosis causes caldesmon to dissociate from microfilaments. Phosphorylation reduces caldesmon binding to actin, myosin, and calmodulin as well as its inhibition of actomyosin ATPase activity. Phosphorylation also occurs in both quiescent and dividing smooth muscle cells with similar effects on the interaction with actin and calmodulin and on microfilaments reorganization.

### 細胞内局在

Cytoplasm > cytoskeleton. Cytoplasm > myofibril. On thin filaments in smooth muscle and on stress fibers in fibroblasts (nonmuscle).

## 画像



ab53917 staining Caldesmon in human uterus tissue by immunohistochemistry. Formalin-fixed paraffin embedded section.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Caldesmon antibody [SPM168], prediluted (ab53917)

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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