# abcam

## Product datasheet

## Anti-Sumo 1 antibody ab11672

★★★★★ 4 Abreviews 32 References 画像数 2

#### 製品の概要

製品名 Anti-Sumo 1 antibody

製品の詳細 Rabbit polyclonal to Sumo 1

由来種 Rabbit

**アプリケーション 適用あり:** IHC-P, IP

種交差性 交差種: Human

免疫原 Recombinant full length protein corresponding to Human Sumo 1.

特記事項 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

#### 製品の特性

製品の状態 Liquid

保存方法 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.

ארע"ד Preservative: 0.05% Sodium azide

精製度 Whole antiserum

**ポリ/モノ** ポリクローナル

アイソタイプ IgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab11672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。

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アプリケーション	Abreviews	特記事項
IHC-P		1/400. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IP	<b>★★★☆☆ (1)</b>	Use at an assay dependent concentration.

#### ターゲット情報

#### 機能

Ubiquitin-like protein that can be covalently attached to proteins as a monomer or a lysine-linked polymer. Covalent attachment via an isopeptide bond to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by E3 ligases such as PIAS1-4, RANBP2 or CBX4. This post-translational modification on lysine residues of proteins plays a crucial role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Involved for instance in targeting RANGAP1 to the nuclear pore complex protein RANBP2. Polymeric SUMO1 chains are also susceptible to polyubiquitination which functions as a signal for proteasomal degradation of modified proteins. May also regulate a network of genes involved in palate development.

#### 関連疾患

Defects in SUMO1 are the cause of non-syndromic orofacial cleft type 10 (OFC10) [MIM:613705]; also called non-syndromic cleft lip with or without cleft palate 10. OFC10 is a birth defect consisting of cleft lips with or without cleft palate. Cleft lips are associated with cleft palate in two-third of cases. A cleft lip can occur on one or both sides and range in severity from a simple notch in the upper lip to a complete opening in the lip extending into the floor of the nostril and involving the upper gum. Note=A chromosomal aberation involving SUMO1 is the cause of OFC10. Translocation t(2;8)(q33.1;q24.3). The breakpoint occurred in the SUMO1 gene and resulted in haploinsufficiency confirmed by protein assays.

#### 配列類似性

Belongs to the ubiquitin family. SUMO subfamily.

Contains 1 ubiquitin-like domain.

#### 翻訳後修飾

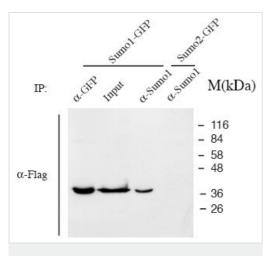
Cleavage of precursor form by SENP1 or SENP2 is necessary for function.

Polymeric SUMO1 chains undergo polyubiquitination by RNF4.

#### 細胞内局在

Nucleus membrane. Nucleus speckle. Cytoplasm. Recruited by BCL11A into the nuclear body.

#### 画像



Immunoprecipitation - Anti-Sumo 1 antibody (ab11672)

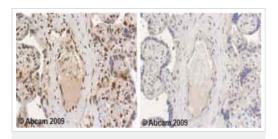
293T cells were transfected with a vector that has Sumo1 fused to GFP and a Flag tag. Cell lysates were used in IP with ab11672 (and a GFP antibody as a control). The resulting western blot was performed with a Flag antibody. As a control, cells were transfected with a a vector with Sumo2 fused to GFP and a Flag tag. ab11672 does not IP anything from this lysate.

Lane 1: Sumo1 fusion lysate - IP'd with GFP antibody

Lane 2: Sumo1 fusion lysate - no IP

Lane 3: Sumo1 fusion lysate - IP'd with ab11672

Lane 4: Sumo2 fusion lysate - IP'd with ab11672



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Sumo 1 antibody (ab11672)

Ab11672 staining human normal placenta. Staining is localized to the nucleus and nuclear membrane.

Left panel: with primary whole serum antibody at 1/400. Right panel: isotype control.

Sections were stained using an automated system DAKO
Autostainer Plus, at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 AR buffer EDTA pH 9.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS), then incubated with primary antibody for 20 minutes, and detected with Dako Envision Flex amplification kit for 30 minutes.

Colorimetric detection was completed with diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and

minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be

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