

### Anti-SOS1 antibody [EPR7480] ab140621

KO 評価済 リコンビナント RabMAb

★★★★★ [3 Abreviews](#) [6 References](#) [画像数 11](#)

#### 製品の概要

製品名	Anti-SOS1 antibody [EPR7480]
製品の詳細	Rabbit monoclonal [EPR7480] to SOS1
由来種	Rabbit
アプリケーション	<b>適用あり:</b> WB, IHC-P, ICC/IF <b>適用なし:</b> Flow Cyt or IP
種交差性	<b>交差種:</b> Human <b>交差が予測される動物種:</b> Mouse, Rat 
免疫原	Recombinant fragment corresponding to Human SOS1 aa 1050-1200.
ポジティブ・コントロール	Raji, K562, HeLa and THP1 cell lysates; Human ovarian carcinoma tissue; Raji cells.
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

#### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at -20°C.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR7480

## 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ab140621の使用に適用されず**  
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)	1/1000 - 1/10000. Predicted molecular weight: 152 kDa.
IHC-P	★★★★★ (2)	1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/250 - 1/500.

## 追加情報

Is unsuitable for Flow Cyt or IP.

## ターゲット情報

## 機能

Promotes the exchange of Ras-bound GDP by GTP.

## 組織特異性

Expressed in gingival tissues.

## 関連疾患

Defects in SOS1 are the cause of gingival fibromatosis 1 (GGF1) [MIM:135300]; also known as GINGF1. Gingival fibromatosis is a rare overgrowth condition characterized by a benign, slowly progressive, nonhemorrhagic, fibrous enlargement of maxillary and mandibular keratinized gingiva. GGF1 is usually transmitted as an autosomal dominant trait, although sporadic cases are common.

Defects in SOS1 are the cause of Noonan syndrome type 4 (NS4) [MIM:610733]. NS4 is an autosomal dominant disorder characterized by dysmorphic facial features, short stature, hypertelorism, cardiac anomalies, deafness, motor delay, and a bleeding diathesis. It is a genetically heterogeneous and relatively common syndrome, with an estimated incidence of 1 in 1000-2500 live births. Rarely, NS4 is associated with juvenile myelomonocytic leukemia (JMML). SOS1 mutations engender a high prevalence of pulmonary valve disease; atrial septal defects are less common.

## 配列類似性

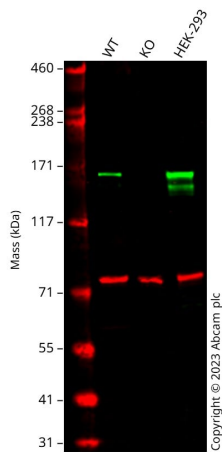
Contains 1 DH (DBL-homology) domain.

Contains 1 N-terminal Ras-GEF domain.

Contains 1 PH domain.

Contains 1 Ras-GEF domain.

## 画像



Western blot - Anti-SOS1 antibody [EPR7480] (ab140621)

**All lanes** : Anti-SOS1 antibody [EPR7480] (ab140621) at 1/1000 dilution

**Lane 1** : Wild-type A549 cell lysate

**Lane 2** : SOS1 knockout A549 cell lysate

**Lane 3** : HEK-293 cell lysate

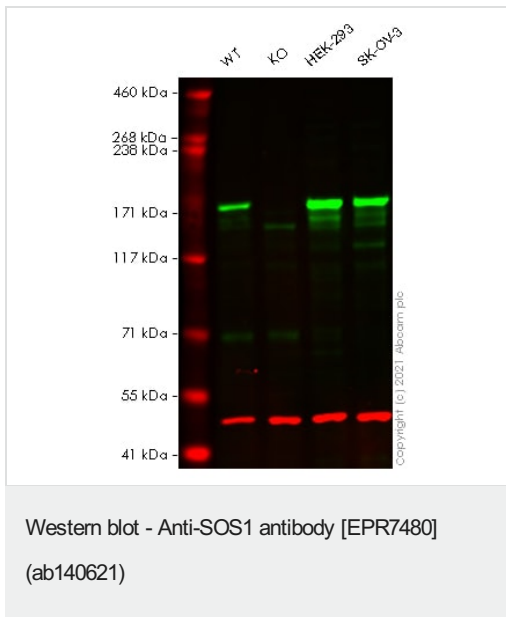
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 152 kDa

**Observed band size:** 165 kDa

Anti-SOS1 antibody [EPR7480] (ab140621) staining at 1/1000 dilution, shown in green; Mouse anti-CANX [CANX/1543] (**ab238078**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab140621 was shown to bind specifically to SOS1. A band was observed at 165 kDa in wild-type A549 cell lysates with no signal observed at this size in SOS1 knockout cell line. To generate this image, wild-type and SOS1 knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween<sup>®</sup> 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



**All lanes** : Anti-SOS1 antibody [EPR7480] (ab140621) at 1/1000 dilution

**Lane 1** : Wild-type A431 cell lysate

**Lane 2** : SOS1 knockout A431 cell lysate

**Lane 3** : HEK-293 cell lysate

**Lane 4** : SK-OV-3 cell lysate

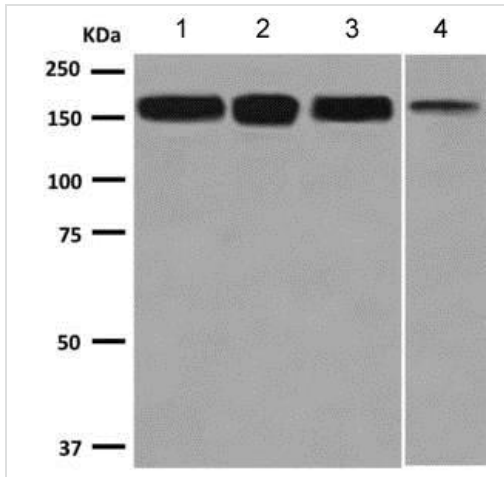
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 152 kDa

**Observed band size:** 171 kDa

False colour image of Western blot: Anti-SOS1 antibody [EPR7480] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab140621 was shown to bind specifically to SOS1. A band was observed at 171 kDa in wild-type A431 cell lysates with no signal observed at this size in SOS1 knockout cell line [ab276087](#) (knockout cell lysate [ab283833](#)). To generate this image, wild-type and SOS1 knockout A431 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween<sup>®</sup> 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



Western blot - Anti-SOS1 antibody [EPR7480] (ab140621)

**All lanes** : Anti-SOS1 antibody [EPR7480] (ab140621) at 1/1000 dilution

**Lane 1** : Raji cell lysate

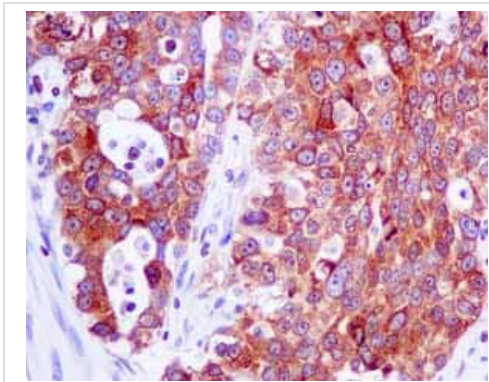
**Lane 2** : K562 cell lysate

**Lane 3** : HeLa cell lysate

**Lane 4** : THP1 cell lysate

Lysates/proteins at 10 µg per lane.

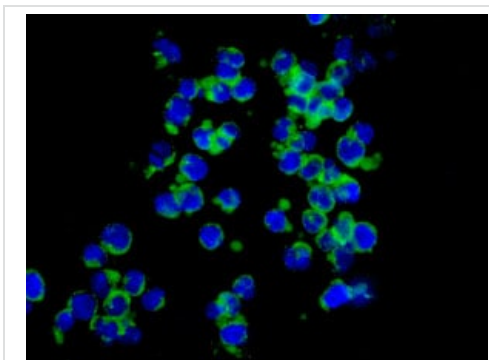
**Predicted band size:** 152 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOS1 antibody [EPR7480] (ab140621)

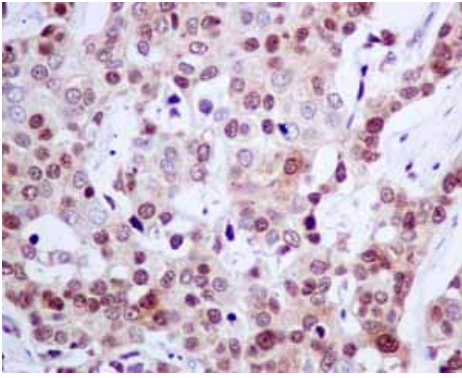
Immunohistochemical analysis of paraffin-embedded Human ovarian carcinoma tissue labelling SOS1 with ab140621 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-SOS1 antibody [EPR7480] (ab140621)

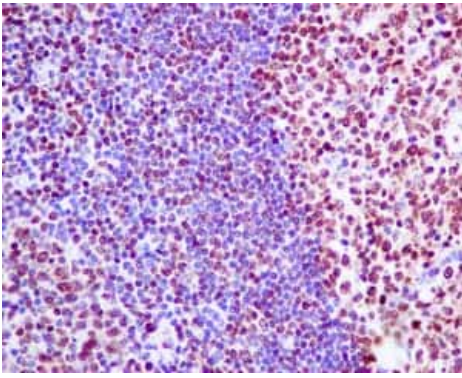
Immunofluorescent staining of Raji cells labelling SOS1 with ab140621 at 1/250 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOS1 antibody [EPR7480] (ab140621)

Immunohistochemical analysis of paraffin embedded Human Breast carcinoma tissue using ab140621 showing +ve staining.

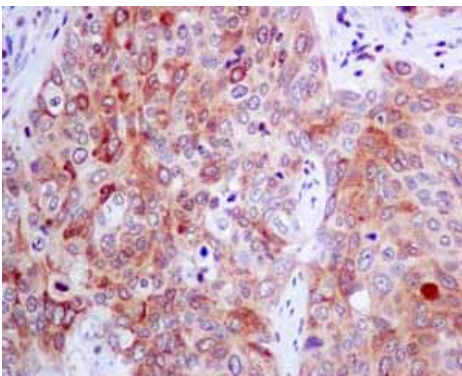
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOS1 antibody [EPR7480] (ab140621)

Immunohistochemical analysis of paraffin embedded normal Human tonsil tissue using ab140621 showing +ve staining.

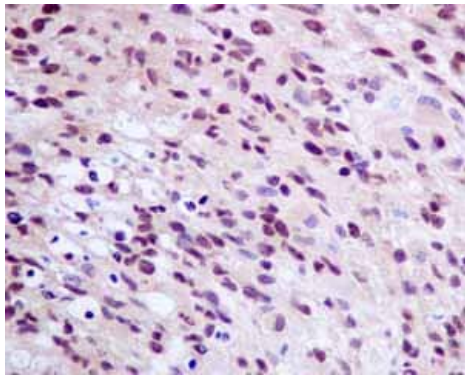
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOS1 antibody [EPR7480] (ab140621)

Immunohistochemical analysis of paraffin embedded Human Lung adenocarcinoma tissue using ab140621 showing +ve staining.

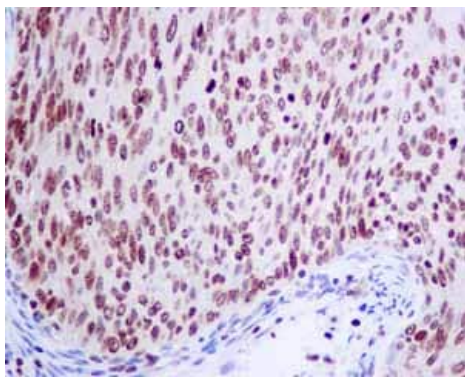
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemical analysis of paraffin embedded Human Glioma tissue using ab140621 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOS1 antibody [EPR7480] (ab140621)



Immunohistochemical analysis of paraffin embedded Human Cervical carcinoma tissue using ab140621 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOS1 antibody [EPR7480] (ab140621)

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-SOS1 antibody [EPR7480] (ab140621)

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

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