

# Human SMAD1 knockout HeLa cell lysate ab257686

画像数 3

### 製品の概要

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製品名	Human SMAD1 knockout HeLa cell lysate
製品の概要	Knockout cell lysate achieved by CRISPR/Cas9.
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 1 bp deletion in exon3 and 1 bp insertion in exon3.
Passage number	<20
Knockout validation	Sanger Sequencing, Western Blot (WB)
Reconstitution notes	To use as WB control, resuspend the lyophilizate in 50 µL of LDS* Sample Buffer to have a final concentration of 2 mg/ml. For reducing conditions, we recommend a final concentration of 0.1 M DTT.

*\*Usage of SDS sample buffer is not recommended with these lyophilized lysates.*

### 特記事項

**Lysate preparation:** Our lysates are made using RIPA buffer to which we add a protease inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). *This means that the protein of interest is denatured.* If you require a native form of the protein please use the live cell version - found [here](#). Please refer to our lysis protocol for further details on how our lysates are prepared.

**User storage instructions:** Lyophilizate may be stored at 4°C. After reconstitution, store at -20°C for short-term storage or -80°C for long-term storage.

Access thousands of knockout cell lysates, generated from commonly used cancer cell lines.

**[See here for more information on knockout cell lysates.](#)**

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### アプリケーション

**適用あり:** WB

## 製品の特性

**保存方法** Store at -80°C. Please refer to protocols.

内容	1 kit
ab262187 - Human SMAD1 knockout HeLa cell lysate	1 x 100µg
ab255929 - Human wild-type HeLa cell lysate	1 x 100µg

**Cell type** epithelial  
**Disease** Adenocarcinoma  
**Gender** Female  
**STR Analysis** Amelogenin X D5S818: 11, 12 D13S317: 12, 13.3 D7S820: 8, 12 D16S539: 9, 10 vWA: 16, 18 TH01: 7 TPOX: 8,12 CSF1PO: 9, 10

## ターゲット情報

**機能** Transcriptional modulator activated by BMP (bone morphogenetic proteins) type 1 receptor kinase. SMAD1 is a receptor-regulated SMAD (R-SMAD). SMAD1/OAZ1/PSMB4 complex mediates the degradation of the CREBBP/EP300 repressor SNIP1.

**組織特異性** Ubiquitous. Highest expression seen in the heart and skeletal muscle.

**配列類似性** Belongs to the dwarfin/SMAD family.  
Contains 1 MH1 (MAD homology 1) domain.  
Contains 1 MH2 (MAD homology 2) domain.

**翻訳後修飾** Phosphorylated on serine by BMP type 1 receptor kinase.  
Ubiquitin-mediated proteolysis by SMAD-specific E3 ubiquitin ligase SMURF1.

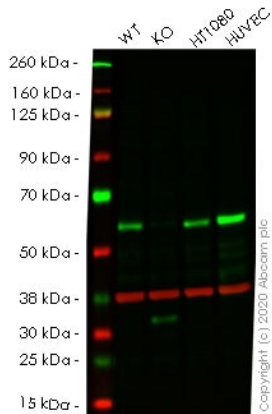
**細胞内局在** Cytoplasm. Nucleus. Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4. Co-localizes with LEMD3 at the nucleus inner membrane.

## 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ab257686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		Use at an assay dependent concentration. Predicted molecular weight: 52 kDa.

## 画像



Western blot - Human SMAD1 knockout HeLa cell lysate (ab257686)

**Lane 1:** Wild-type HeLa cell lysate (20µg)

**Lane 2:** SMAD1 knockout HeLa cell lysate (20µg)

**Lane 3:** HT1080 cell lysate (20µg)

**Lane 4:** Huvec cell lysate (20µg)

**Lanes 1- 4:** Merged signal (red and green). Green - **ab126761** observed at 52 kDa. Red - loading control, **ab8245** observed at 37 kDa.

**ab126761** Anti-Smad1 antibody [EPR5522] was shown to specifically react with Smad1 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line **ab265400** (knockout cell lysate ab257686) was used. Wild-type and Smad1 knockout samples were subjected to SDS-PAGE. **ab126761** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4 °C at 1 in 1000 and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

```
Mut  CACTCTCCCAATAGCAGTTACCCAAACTCT-CTGGGAGCAGCAGCAGCACCTACCCCTCAC
      |||
WT   CACTCTCCCAATAGCAGTTACCCAAACTCTCTGGGAGCAGCAGCAGCACCTACCCCTCAC
```

Sanger Sequencing - Human SMAD1 knockout HeLa cell lysate (ab257686)

Allele-1: 1 bp deletion in exon3

```
Mut  CACTCTCCCAATAGCAGTTACCCAAACTCTTCTGGGAGCAGCAGCAGCACCTACCCCTCA
      |||
WT   CACTCTCCCAATAGCAGTTACCCAAACTCTCTGGGAGCAGCAGCAGCACCTACCCCTCA
```

Sanger Sequencing - Human SMAD1 knockout HeLa cell lysate (ab257686)

Allele-2: 1 bp insertion in exon3

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