


Product datasheet

Anti-Smoothened antibody ab38686

★★★★☆ 7 Abreviews 27 References 画像数 4

製品の概要

製品名	Anti-Smoothened antibody
製品の詳細	Rabbit polyclonal to Smoothened
アプリケーション	適用あり: WB, ICC/IF, IHC-FoFr
種交差性	交差種: Mouse, Rat, Human 交差が予測される動物種: Horse, Chicken, Pufferfish, Zebrafish 
免疫原	Synthetic peptide conjugated to KLH derived from within residues 750 to the C-terminus of Human Smoothened.Immunogen の所有権に関して(Peptide available as <a href="#">ab39344</a> .)
ポジティブ・コントロール	This antibody gave a positive signal against Smoothened partial recombinant (tagged) protein.

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.
バッファー	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
精製度	Immunogen affinity purified
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

Our [Abpromise guarantee](#) covers the use of **ab38686** in the following tested applications.

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

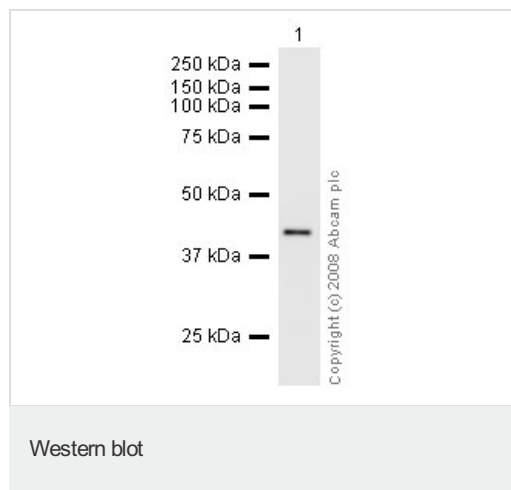
アプリケーション	Abreviews	特記事項
WB	★★★★☆	Use a concentration of 1 µg/ml. Predicted molecular weight: 86 kDa.
ICC/IF	★★★★★	Use a concentration of 5 µg/ml.

アプリケーション	Abreviews	特記事項
IHC-FoFr	★★★★☆	1/3000.

## ターゲット情報

機能	G protein-coupled receptor that probably associates with the patched protein (PTCH) to transduce the hedgehog's proteins signal. Binding of sonic hedgehog (SHH) to its receptor patched is thought to prevent normal inhibition by patched of smoothened (SMO). Required for the accumulation of KIF7 and GLI3 in the cilia.
配列類似性	Belongs to the G-protein coupled receptor Fz/Smo family. Contains 1 FZ (frizzled) domain.
細胞内局在	Membrane.

## 画像



Anti-Smoothened antibody (ab38686) at 1 µg/ml + Human Smoothened Partial Recombinant Protein (Tagged) at 0.1 µg

### Secondary

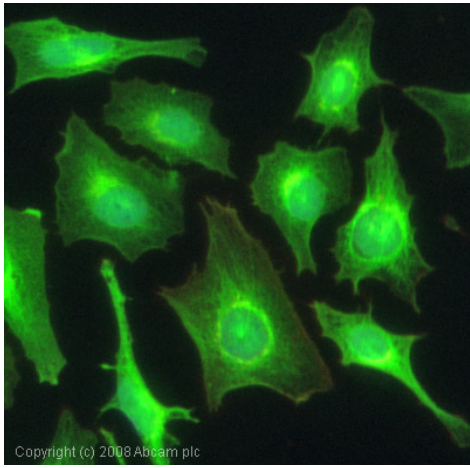
Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Performed under reducing conditions.

**Predicted band size** : 86 kDa

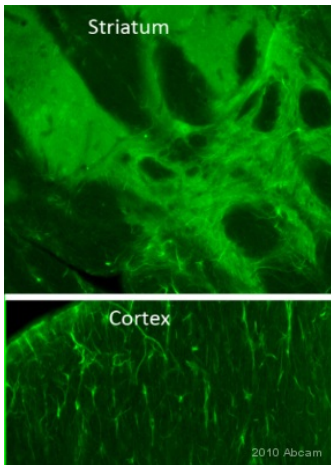
**Observed band size** : 41 kDa

ab38686 was tested against Human Smoothened Partial Recombinant Protein (Tagged) predicted to run at 41 kDa.



Immunocytochemistry/ Immunofluorescence -  
Smoothened antibody (ab38686)

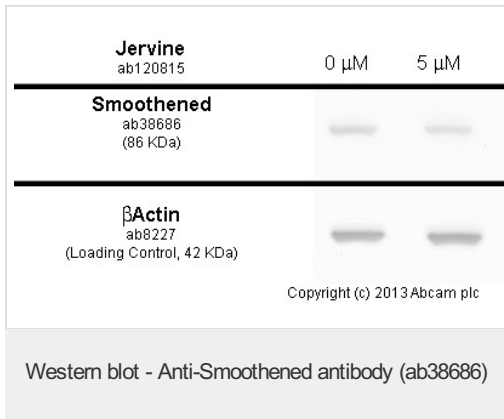
ICC/IF image of ab38686 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab38686, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue).



Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-Smoothened antibody (ab38686)

This image is courtesy of an abreview submitted by Sophie Pezet, CNRS, Paris, France

Immunohistochemical detection of Smoothened protein with antibody ab38686 on rat brain PFA-perfusion fixed frozen sections. Primary antibody ab38686 was diluted 1/3000 and incubated for 18 hours @ 20°C in PBS + 0.3 % TritonX100. Secondary antibody: goat anti-rabbit Alexa Fluor 488® (1/1000). This antibody was used on (30µm) free-floating sections of rat brain. The antibody produced some staining in the whole CNS, in glial cells as well as some diffuse staining. No staining was observed in the dentate gyrus although this was expected as Rajendran et al (Neurosci Lett. 2009 April 10 453(3): 190–194) showed the presence of Smoothened mRNA in this structure. However, literature on the protein expression is very limited; it is possible that the protein might be expressed in glial cells too. The pictures submitted show the staining at the level of the striatum (top panel). ab38686 stains some neuron-like cells and some glial cel



Developed using the ECL technique

Performed under reducing conditions.

**Predicted band size** : 86 kDa

**Exposure time** : 10 seconds

NIH-3T3 cells were incubated at 37°C for 7h with vehicle control (0  $\mu$ M) and 5  $\mu$ M of jervine ([ab120815](#)) in DMSO. Decreased expression of smoothened (ab38686) in NIH-3T3 cells correlates with an increase in jervine concentration, as described in literature.

Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 20 $\mu$ g of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 3% milk before being incubated with ab38686 at 1  $\mu$ g /ml and [ab8227](#) at 1  $\mu$ g /ml overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP ([ab97051](#)) at 1/10000 dilution and visualised using ECL development solution.

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