


Product datasheet

Anti-Smoothened antibody ab80683

2 Images

Overview

Product name	Anti-Smoothened antibody
Description	Rabbit polyclonal to Smoothened
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Horse, Chicken, Zebrafish 
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 750 to the C-terminus of Human Smoothened. Read Abcam's proprietary immunogen policy (Peptide available as ab39344 .)
Positive control	This antibody gave a positive signal against Human Smoothened Partial Recombinant Protein (Tagged)
General notes	ab80683 is raised using the same immunogen as ab38686 . Batches sold under ab80683 have passed QC testing in WB (Recombinant only). In our hands, this product did not work in ICC/IF. For further information please contact our Customer Services team.

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab80683** in the following tested applications.

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

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 41 kDa (predicted molecular weight: 86 kDa). Can be blocked with Human Smoothened peptide (ab39344) .
ICC/IF		Use a concentration of 5 µg/ml.

Target

Function

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.

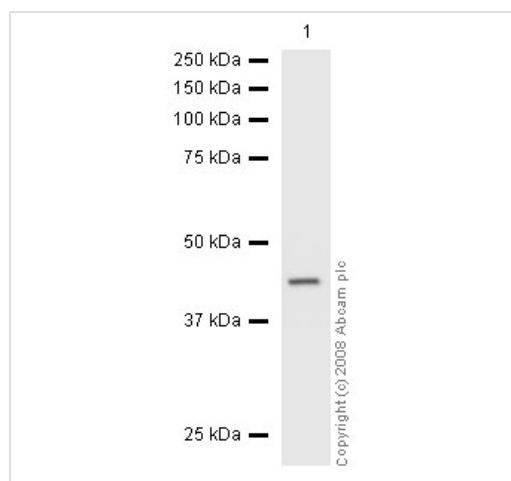
Sequence similarities

Belongs to the G-protein coupled receptor Fz/Smo family.
Contains 1 FZ (frizzled) domain.

Cellular localization

Membrane.

Images



Western blot - Anti-Smoothened antibody (ab80683)

Anti-Smoothened antibody (ab80683) at 1 µg/ml + Human Smoothened Partial Recombinant Protein (Tagged) at 0.1 µg

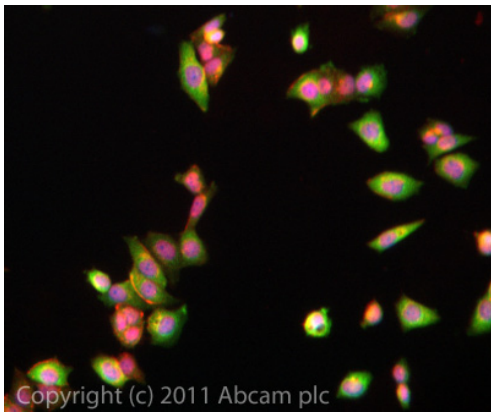
Secondary

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

Predicted band size: 86 kDa

Observed band size: 41 kDa

ab80683 was tested against Human Smoothened Partial Recombinant Protein (Tagged) predicted to run at 41 kDa.



Immunocytochemistry/ Immunofluorescence - Anti-Smoothed antibody (ab80683)

ICC/IF image of ab80683 stained MCF7 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 (ab80683, 5µg/ml) overnight at +4°C. The secondary antibody (green) was ab96899 Dylight 488 goat anti-rabbit IgG (H+L) used at a 1/250 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) at a concentration of 1.43µM.

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