

Product datasheet

Human BSG (CD147) knockout A549 cell lysate ab275500

5 Images

Overview

Product name	Human BSG (CD147) knockout A549 cell lysate
Product overview	Knockout cell lysate achieved by CRISPR/Cas9.
Parental Cell Line	A549
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, Homozygous: 78 bp insertion in exon 5 introducing premature STOP codon
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. <i>*Usage of SDS sample buffer is not recommended with these lyophilized lysates.</i>

Notes

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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Tested applications**Suitable for:** WB**Properties****Storage instructions**

Store at -80°C. Please refer to protocols.

Components	1 kit
ab277304 - Human BSG knockout A549 cell lysate	1 x 100µg
ab277305 - Human wild-type A549 cell lysate	1 x 100µg

Cell type

epithelial

Disease

Carcinoma

Gender

Male

Target**Function**

Plays pivotal roles in spermatogenesis, embryo implantation, neural network formation and tumor progression. Stimulates adjacent fibroblasts to produce matrix metalloproteinases (MMPS). May target monocarboxylate transporters SLC16A1, SLC16A3 and SLC16A8 to plasma membranes of retinal pigment epithelium and neural retina. Seems to be a receptor for oligomannosidic glycans. In vitro, promotes outgrowth of astrocytic processes.

Tissue specificity

Present only in vascular endothelium in non-neoplastic regions of the brain, whereas it is present in tumor cells but not in proliferating blood vessels in malignant gliomas.

Sequence similarities

Contains 1 Ig-like C2-type (immunoglobulin-like) domain.
Contains 1 Ig-like V-type (immunoglobulin-like) domain.

Post-translational modifications

N-glycosylated.

Cellular localization

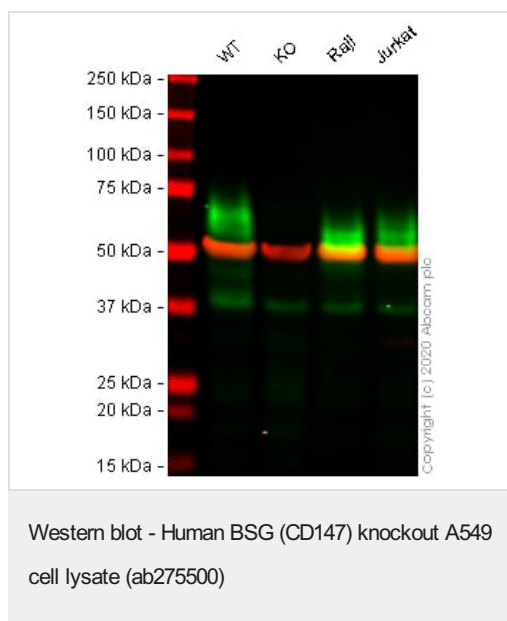
Cell membrane. Melanosome. Colocalizes with SLC16A1 and SLC16A8 (By similarity). Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Applications**The Abpromise guarantee**Our **Abpromise guarantee** covers the use of ab275500 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 at an assay dependent concentration. Predicted molecular weight: 42 kDa.

Images



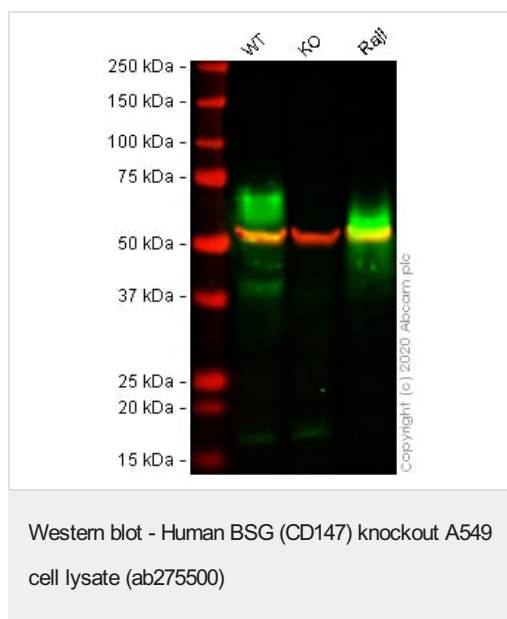
Lane 1: Wild-type A549 cell lysate 30 ug

Lane 2: BSG knockout A549 cell lysate 30 ug

Lane 3: Raji cell lysate 30 ug

Lane 4: Jurkat cell lysate 30 ug

Lanes 1 - 4: Merged signal (red and green). Green - [**ab666**](#) observed at 55-70 kDa. Red - loading control [**ab52866**](#) (Rabbit anti-alpha Tubulin antibody [EP1332Y]) observed at 55kDa. [**ab666**](#) was shown to react with CD147 in wild-type A549 cells in western blot with loss of signal observed in BSG knockout cell line [**ab273748**](#) (knockout cell lysate ab275500). Wild-type and BSG knockout A549 cell lysates were subjected to SDS-PAGE. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with [**ab666**](#) and [**ab52866**](#) (Rabbit anti-alpha Tubulin antibody [EP1332Y]) overnight at 4 °C at 1 ug/ml and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed ([**ab216772**](#)) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed ([**ab216777**](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

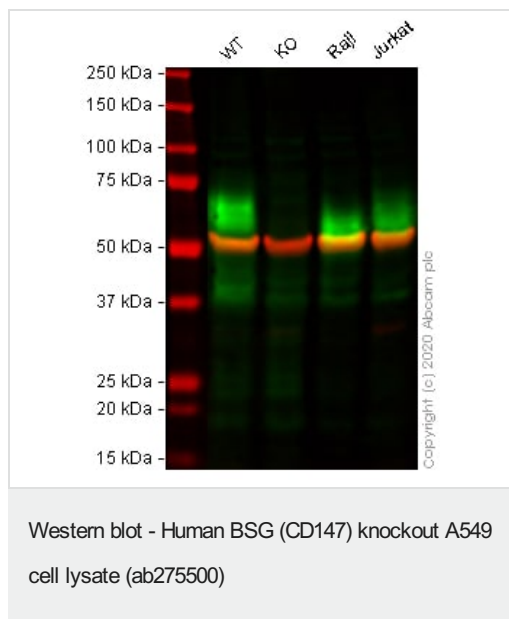


Lane 1: Wild-type A549 cell lysate 30 ug

Lane 2: BSG knockout A549 cell lysate 30 ug

Lane 3: Raji cell lysate 30 ug

Lanes 1 - 3: Merged signal (red and green). Green - [**ab108308**](#) observed at 42-70 kDa. Red - loading control [**ab7291**](#) (Mouse anti-Alpha Tubulin [DM1A]) observed at 55kDa. [**ab108308**](#) was shown to react with CD147 in wild-type A549 cells in western blot with loss of signal observed in BSG knockout cell line [**ab273748**](#) (knockout cell lysate ab275500). Wild-type and BSG knockout A549 cell lysates were subjected to SDS-PAGE. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with [**ab108308**](#) and [**ab7291**](#) (Mouse anti-Alpha Tubulin [DM1A]) overnight at 4 °C at a 1 in 1000 Dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ([**ab216773**](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([**ab216776**](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Lane 1: Wild-type A549 cell lysate 30 ug

Lane 2: BSG knockout A549 cell lysate 30 ug

Lane 3: Raji cell lysate 30 ug

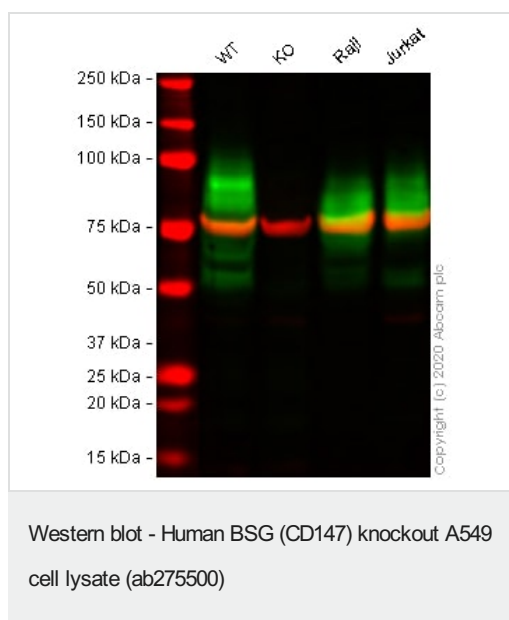
Lane 4: Jurkat cell lysate 30 ug

Lanes 1 - 4: Merged signal (red and green). Green - **ab119020**

observed at 55-70 kDa. Red - loading control **ab52866** (Rabbit anti-alpha Tubulin antibody [EP1332Y]) observed at 55kDa.

ab119020 was shown to react with CD147 in wild-type A549 cells in western blot with loss of signal observed in BSG knockout cell line **ab273748** (knockout cell lysate ab275500). Wild-type and BSG knockout A549 cell lysates were subjected to SDS-PAGE.

Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with **ab119020** and **ab52866** (Rabbit anti-alpha Tubulin antibody [EP1332Y]) overnight at 4 °C at a 1 in 2000 Dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (**ab216772**) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed (**ab216777**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Lane 1: Wild-type A549 cell lysate 30 ug

Lane 2: BSG knockout A549 cell lysate 30 ug

Lane 3: Raji cell lysate 30 ug

Lane 4: Jurkat cell lysate 30 ug

Lanes 1 - 4: Merged signal (red and green). Green - **ab230921**

observed at 42-70 kDa. Red - loading control **ab52866** (Rabbit anti-alpha Tubulin antibody [EP1332Y]) observed at 55kDa.

ab230921 was shown to react with CD147 in wild-type A549 cells in western blot with loss of signal observed in BSG knockout cell line **ab273748** (knockout cell lysate ab275500). Wild-type and BSG knockout A549 cell lysates were subjected to SDS-PAGE.

Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with **ab230921** and **ab52866** (Rabbit anti-alpha Tubulin antibody [EP1332Y]) overnight at 4 °C at a 1 in 500 Dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (**ab216772**) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed (**ab216777**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Allele-1: 78 bp insertion in exon 5 introducing premature STOP codon.

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