

## Product datasheet

# Human BSG (CD147) knockout HEK-293T cell lysate ab256853

4 Images

### Overview

Product name	Human BSG (CD147) knockout HEK-293T cell lysate
Product overview	Knockout cell lysate achieved by CRISPR/Cas9.
Parental Cell Line	HEK293T
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 44 bp insertion in exon 4 and 5 bp deletion in exon 4.
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
ab260933 - Human BSG knockout HEK293T cell lysate	1 x 100µg
ab255553 - Human wild-type HEK293T cell lysate	1 x 100µg

**Cell type** epithelial

**STR Analysis** Amelogenin X D5S818: 8, 9 D13S317: 12, 14 D7S820: 11 D16S539: 9, 13 vWA: 16, 19 TH01: 7, 9.3 TPOX: 11 CSF1PO: 11, 12

## 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.

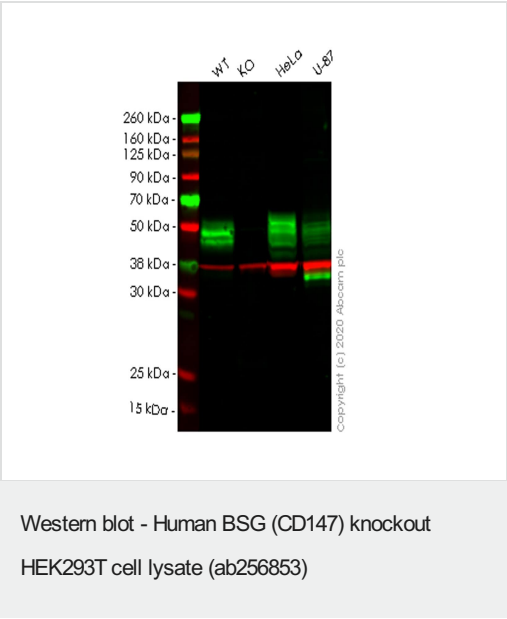
## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab256853 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 HEK293T cell lysate (20 µg)

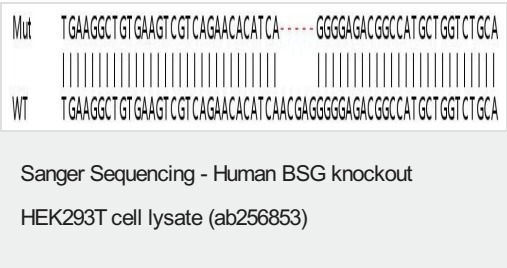
**Lane 2:** BSG knockout HEK293T cell lysate (20 µg)

**Lane 3:** HeLa cell lysate (20 µg)

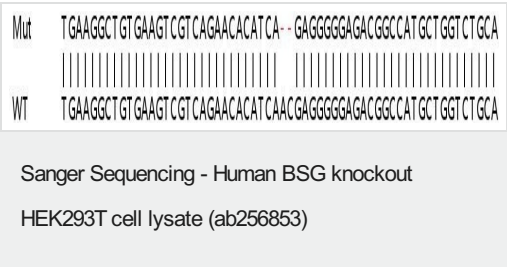
**Lane 4:** U-87 MG cell lysate (20 µg)

**Lanes 1-4:** Merged signal (red and green). Green - **ab108308** observed at 50 kDa. Red - loading control **ab8245** observed at 36 kDa.

**ab108308** Anti-CD147 antibody [EPR4053] was shown to specifically react with CD147 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line **ab266331** (knockout cell lysate ab256853) was used. Wild-type and CD147 knockout samples were subjected to SDS-PAGE. **ab108308** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution 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.



Allele-1: 5 bp deletion in exon 4



Allele-2: 44 bp insertion in exon 4

Mut	TGAAGGCTGTGAAGTCGTCAGAACACATCAAGGGAGACGGCCATGCTGGTCTGCAAGTCA
WT	TGAAGGCTGTGAAGTCGTCAGAACACATCA
Sanger Sequencing - Human BSG knockout	
HEK293T cell lysate (ab256853)	

Allele-3:

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

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