


Anti-HGS antibody ab72053

[8 References](#) [3 Images](#)

Overview

Product name	Anti-HGS antibody
Description	Rabbit polyclonal to HGS
Host species	Rabbit
Tested applications	Suitable for: WB, IP
Species reactivity	Reacts with: Human Predicted to work with: Cow 
Immunogen	Synthetic peptide within Human HGS aa 700 to the C-terminus (C terminal). The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact our Scientific Support team to discuss your requirements. Database link: O14964
Positive control	WB: HeLa, Renca, CT26.WT and 4T1 whole cell lysate. IP: HeLa whole cell lysate.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 6.8 Preservative: 0.09% Sodium azide Constituents: 0.1% BSA, Tris buffered saline
Purity	Immunogen affinity purified
Purification notes	ab72053 was affinity purified using an epitope specific to HGS immobilized on solid support.
Clonality	Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab72053 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		1/2000 - 1/10000. Detects a band of approximately 110 kDa (predicted molecular weight: 86 kDa).
IP		Use at 2-10 µg/mg of lysate.

Target

Function

Involved in intracellular signal transduction mediated by cytokines and growth factors. When associated with STAM, it suppresses DNA signaling upon stimulation by IL-2 and GM-CSF. Could be a direct effector of PI3-kinase in vesicular pathway via early endosomes and may regulate trafficking to early and late endosomes by recruiting clathrin. May concentrate ubiquitinated receptors within clathrin-coated regions. Involved in down-regulation of receptor tyrosine kinase via multivesicular body (MVBs) when complexed with STAM (ESCRT-0 complex). The ESCRT-0 complex binds ubiquitin and acts as sorting machinery that recognizes ubiquitinated receptors and transfers them to further sequential lysosomal sorting/trafficking processes. May contribute to the efficient recruitment of SMADs to the activin receptor complex. Involved in receptor recycling via its association with the CART complex, a multiprotein complex required for efficient transferrin receptor recycling but not for EGFR degradation.

Tissue specificity

Ubiquitous expression in adult and fetal tissues with higher expression in testis and peripheral blood leukocytes.

Sequence similarities

Contains 1 FYVE-type zinc finger.
Contains 1 UIM (ubiquitin-interacting motif) repeat.
Contains 1 VHS domain.

Domain

Has a double-sided UIM that can bind 2 ubiquitin molecules, one on each side of the helix. The FYVE-type zinc finger domain mediates interactions with phosphatidylinositol 3-phosphate in membranes of early endosomes and penetrates bilayers. The FYVE domain insertion into PtdIns(3)P-enriched membranes is substantially increased in acidic conditions.

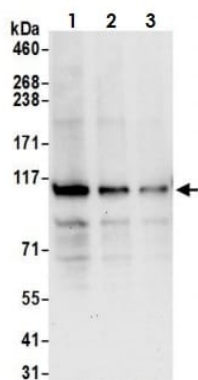
Post-translational modifications

Phosphorylated on Tyr-334. A minor site of phosphorylation on Tyr-329 is detected (By similarity). Phosphorylation occurs in response to EGF, IL-2, GM-CSF and HGF.
Ubiquitinated by ITCH.

Cellular localization

Cytoplasm. Early endosome membrane. Endosome > multivesicular body membrane.

Images



Western blot - Anti-HGS antibody (ab72053)

All lanes : Anti-HGS antibody (ab72053) at 0.1 $\mu\text{g/ml}$

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 50 μg

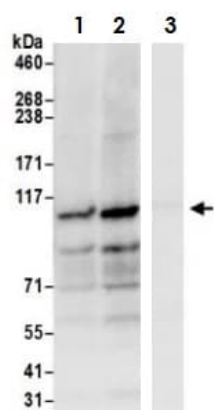
Lane 2 : HeLa whole cell lysate at 15 μg

Lane 3 : HeLa whole cell lysate at 5 μg

Predicted band size: 86 kDa

Exposure time: 10 seconds

Lysates prepared using NETN lysis buffer.

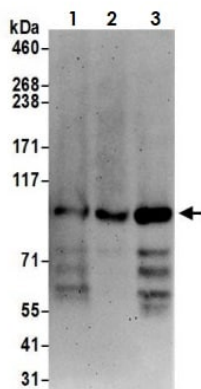


Immunoprecipitation - Anti-HGS antibody (ab72053)

Detection of human HGS by western blot of immunoprecipitates.

Samples: Whole cell lysate (0.5 or 1.0 mg per IP reaction; 20% of IP loaded) from HeLa cells prepared using NETN lysis buffer.

Antibodies: ab72053 used for IP at 6 μg per reaction, lanes 1 and 2, lane 3 is control IgG. For blotting immunoprecipitated HGS, ab72053 was used at 0.4 $\mu\text{g/ml}$.



Western blot - Anti-HGS antibody (ab72053)

All lanes : Anti-HGS antibody (ab72053) at 0.1 µg/ml

Lane 1 : Renca (Mouse renal adenocarcinoma cell line) whole cell lysate

Lane 2 : CT26.WT (Mouse renal colorectal carcinoma cell line) whole cell lysate

Lane 3 : 4T1 (Mouse mammary gland cell line) whole cell lysate

Lysates/proteins at 15 µg per lane.

Predicted band size: 86 kDa

Exposure time: 3 minutes

Lysates prepared using NETN lysis buffer.

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