

Datasheet for ABIN968229

anti-SHC1 antibody (AA 359-473)



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Overview

Quantity:	150 µg
Target:	SHC1
Binding Specificity:	AA 359-473
Reactivity:	Human, Mouse, Rat, Dog, Chicken
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SHC1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human SHC aa. 359-473
Clone:	30-SHC
Isotype:	IgG1
Cross-Reactivity:	Mouse (Murine), Rat (Rattus), Dog (Canine), Chicken
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

chromatography.

Target Details

Target:	SHC1
Alternative Name:	SHC (SHC1 Products)
Background:	The mammalian SHC proteins, which are expressed as multiple isoforms (46, 52, and 66 kDa), each contain a C-terminal SH2 domain and an N-terminal glycine/proline rich sequence. These proteins function as early signaling intermediates (also called adaptor proteins) which relay G protein coupled receptor (GPCR) and receptor tyrosine kinase (RTK)-induced signals via the Ras transduction pathway. To this end, the SHC proteins contain specific tyrosine residues which are phosphorylated following association with the active RTKs. Phosphorylated SHC forms a complex with the adaptor protein GRB2. Association of the SHC-GRB2 complex with the Ras guanine nucleotide exchange factor (Ras-GEF) mediates the localization of Ras-GEF to the plasma membrane. Once at the plasma membrane, Ras-GEF activates Ras by catalyzing the Ras-GTP for Ras-GDP exchange. Over-expression of SHC results in cell transformation, and phosphorylation of SHC correlates with activation of the ERK1/ERK2 kinases. The SHC proteins are mediators of signals that are essential for cell metabolism, growth, and differentiation.
Molecular Weight:	66, 52 & 46 kDa
Pathways:	RTK Signaling , TCR Signaling , Fc-epsilon Receptor Signaling Pathway , EGFR Signaling Pathway , Neurotrophin Signaling Pathway , ER-Nucleus Signaling , Signaling Events mediated by VEGFR1 and VEGFR2

Application Details

Comment:	Related Products: ABIN968535 , ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide

Handling

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store undiluted at -20° C.

Publications

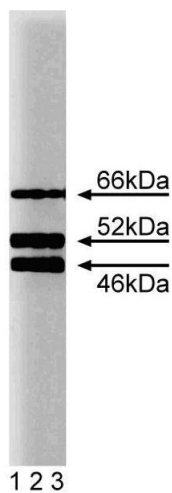
Product cited in: Kiely, Sant, OConnor: "RACK1 is an insulin-like growth factor 1 (IGF-1) receptor-interacting protein that can regulate IGF-1-mediated Akt activation and protection from cell death." in: **The Journal of biological chemistry**, Vol. 277, Issue 25, pp. 22581-9, (2002) ([PubMed](#)).

Ugi, Imamura, Ricketts, Olefsky: "Protein phosphatase 2A forms a molecular complex with Shc and regulates Shc tyrosine phosphorylation and downstream mitogenic signaling." in: **Molecular and cellular biology**, Vol. 22, Issue 7, pp. 2375-87, (2002) ([PubMed](#)).

Imokawa, Kobayasi, Miyagishi: "Intracellular signaling mechanisms leading to synergistic effects of endothelin-1 and stem cell factor on proliferation of cultured human melanocytes. Cross-talk via trans-activation of the tyrosine kinase c-kit receptor." in: **The Journal of biological chemistry**, Vol. 275, Issue 43, pp. 33321-8, (2000) ([PubMed](#)).

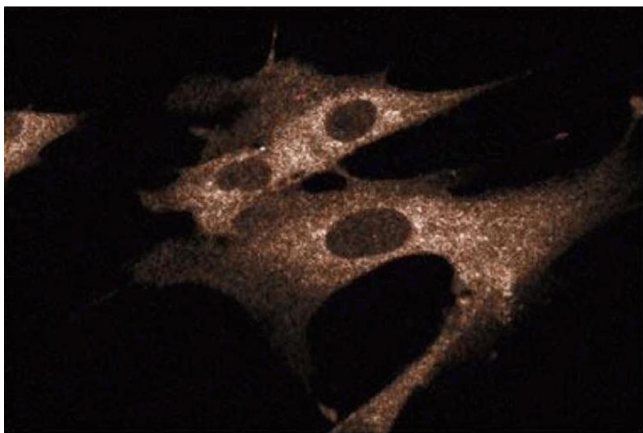
Laser, Willey, Jiang, Cooper, Menick, Zile, Kuppuswamy: "Integrin activation and focal complex formation in cardiac hypertrophy." in: **The Journal of biological chemistry**, Vol. 275, Issue 45, pp. 35624-30, (2000) ([PubMed](#)).

Pelicci, Lanfrancone, Grignani, McGlade, Cavallo, Forni, Nicoletti, Grignani, Pawson, Pelicci: "A novel transforming protein (SHC) with an SH2 domain is implicated in mitogenic signal transduction." in: **Cell**, Vol. 70, Issue 1, pp. 93-104, (1992) ([PubMed](#)).



Western Blotting

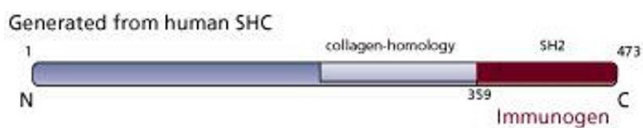
Image 1. Western blot analysis of SHC on a HeLa cell lysate (Human cervical epitheloid carcinoma, ATCC CCL-2.2). Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the mouse anti-SHC antibody.



Immunofluorescence

Image 2. Immunofluorescence staining of WI-38 cells (Human lung fibroblasts, ATCC CCL-75).

Image 3.



Please check the [product details page](#) for more images. Overall 4 images are available for ABIN968229.