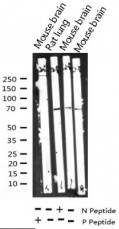
Phospho-Shc (Tyr427) Ab

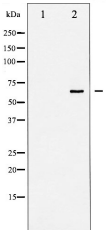
Cat.#: AF3246	Concn.: 1mg/ml	Mol.Wt.: 70kDa
Size: 100ul,200ul	Source: Rabbit	Clonality: Polyclonal

Application:	WB 1:500-1:2000 IHC 1:50-1:200, IF/ICC 1:100-1:500
Reactivity:	Human,Mouse,Rat
Purification:	The Ab is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Specificity:	Phospho-Shc (Tyr427) Ab detects endogenous levels of Shc only when phosphorylated at Tyrosine 427.
Immunogen:	A synthesized peptide derived from human Shc around the phosphorylation site of Tyrosine 427.
Uniprot:	P29353
Description:	Shc1 IS an adaptor protein containing a SH2 domain and a PID domain within a PH domain-like fold. Three isoforms(p66, p52 and p46), produced by alternative initiation, variously regulate growth factor signaling, oncogenesis and apoptosis.
Subcellular Location:	Cytoplasm; Mitochondrion matrix. Localized to the mitochondria matrix. Targeting of isoform p46Shc to mitochondria is mediated by its first 32 amino acids, which behave as a bona fide mitochondrial targeting sequence. Isoform p52Shc and isoform p66Shc, that contain the same sequence but more internally located, display a different subcellular localization and Mitochondrion. In case of oxidative conditions, phosphorylation at 'Ser-36' of isoform p66Shc, leads to mitochondrial accumulation.
Tissue Specificity:	Widely expressed. Expressed in neural stem cells but absent in mature neurons.
Similarity:	In response to a variety of growth factors, isoform p46Shc and isoform p52Shc bind to phosphorylated Trk receptors through their phosphotyrosine binding (PID) and/or SH2 domains. The PID and SH2 domains bind to specific phosphorylated tyrosine residues in the Asn-Pro-Xaa-Tyr(P) motif of the Trk receptors. Isoform p46Shc and isoform p52Shc are in turn phosphorylated on three tyrosine residues within the extended proline-rich domain. These phosphotyrosines act as docking site for GRB2 and thereby are involved in Ras activation (By similarity).

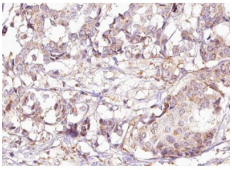
Storage Condition and Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.



Western blot analysis of Phospho-Shc (Tyr427) expression in various lysates



Western blot analysis of Shc phosphorylation expression in EGF treated 293 whole cell lysates,The lane on the left is treated with the antigen-specific peptide.



AF3246 at 1/100 staining human Breast carcinoma tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.

AF3246 staining 293 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab(Cat.# S0006), diluted at 1/600, was used as secondary Ab.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.