# abcam

### Product datasheet

## Anti-SHC (phospho Y427) antibody [EPR778(2)Y] ab68166

ועלשעבע RabMAb

### 画像数 2

### 製品の概要

製品名 Anti-SHC (phospho Y427) antibody [EPR778(2)Y]

製品の詳細 Rabbit monoclonal [EPR778(2)Y] to SHC (phospho Y427)

由来種 Rabbit

アプリケーション **適用あり:** WB

適用なし: Flow Cyt,IHC-Fr,IHC-P or IP

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 🔷

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール A431 cells treated with EGF

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity - Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb** patents.

### 製品の特性

製品の状態 Liquid

Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C. 保存方法

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS

精製度 Protein A purified

ポリモノ モノクローナル クローン名 EPR778(2)Y

アイソタイプ lgG

**The Abpromise guarantee Abpromise保証は、**次のテスト済みアプリケーションにおけるab68166の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/500 - 1/1000. Detects a band of approximately 46, 52, 66 kDa (predicted molecular weight: 63 kDa).

### 追加情報

Is unsuitable for Flow Cyt, IHC-Fr, IHC-P or IP.

### ターゲット情報

### 機能

Signaling adapter that couples activated growth factor receptors to signaling pathways. Participates in a signaling cascade initiated by activated KIT and KITLG/SCF. Isoform p46Shc and isoform p52Shc, once phosphorylated, couple activated receptor tyrosine kinases to Ras via the recruitment of the GRB2/SOS complex and are implicated in the cytoplasmic propagation of mitogenic signals. Isoform p46Shc and isoform p52Shc may thus function as initiators of the Ras signaling cascade in various non-neuronal systems. Isoform p66Shc does not mediate Ras activation, but is involved in signal transduction pathways that regulate the cellular response to oxidative stress and life span. Isoform p66Shc acts as a downstream target of the tumor suppressor p53 and is indispensable for the ability of stress-activated p53 to induce elevation of intracellular oxidants, cytochrome c release and apoptosis. The expression of isoform p66Shc has been correlated with life span (By similarity). Participates in signaling downstream of the angiopoietin receptor TEK/TIE2, and plays a role in the regulation of endothelial cell migration and sprouting angiogenesis.

### 組織特異性

### 配列類似性

ドメイン

### 翻訳後修飾

Widely expressed. Expressed in neural stem cells but absent in mature neurons.

Contains 1 PID domain.
Contains 1 SH2 domain.

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.

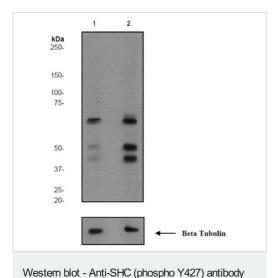
# Phosphorylated by activated epidermal growth factor receptor. Phosphorylated in response to FLT4 and KIT signaling. Isoform p46Shc and isoform p52Shc are phosphorylated on tyrosine residues of the Pro-rich domain. Isoform p66Shc is phosphorylated on Ser-36 by PRKCB upon treatment with insulin, hydrogen peroxide or irradiation with ultraviolet light (By similarity). Tyrosine phosphorylated in response to FLT3 signaling (By similarity). Tyrosine phosphorylated by activated PTK2B/PYK2 (By similarity). Tyrosine phosphorylated by ligand-activated ALK. Tyrosine phosphorylated by ligand-activated PDGFRB. Tyrosine phosphorylated by TEK/TIE2. May be tyrosine phosphorylated by activated PTK2/FAK1; tyrosine phosphorylation was seen in an astrocytoma biopsy, where PTK2/FAK1 kinase activity is high, but not in normal brain tissue. Isoform p52Shc dephosphorylation by PTPN2 may regulate interaction with GRB2.

# 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

### 細胞内局在

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.

### 画像



[EPR778(2)Y] (ab68166)

**All lanes :** Anti-SHC (phospho Y427) antibody [EPR778(2)Y] (ab68166) at 1/500 dilution

Lane 1: A431 lysate

Lane 2: A431 lysate - EGF treated

Lysates/proteins at 10 µg/ml per lane.

### Secondary

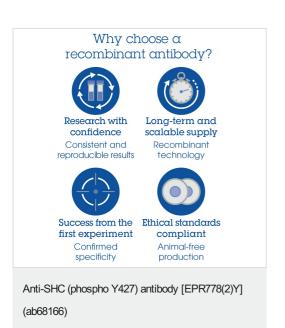
All lanes: HRP labelled goat anti-rabbit lgG at 1/2000 dilution

**Predicted band size:** 63 kDa **Observed band size:** 66 kDa

Additional bands at: 46 kDa (possible isoform), 52 kDa (possible

isoform)

Beta tubulin loading control is also shown



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