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Product datasheet

Anti-Syk (phospho Y348) antibody ab52212

2 References 画像数 1

製品の概要

製品名 Anti-Syk (phospho Y348) antibody

製品の詳細 Rabbit polyclonal to Syk (phospho Y348)

由来種 Rabbit

 アプリケーション
 適用あり: IHC-P

 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 corresponding to Human Syk (phospho Y348).

Database link: P43405

Run BLAST with
Run BLAST with

ポジティブ・コントロール Human breast carcinoma tissue

特記事項 ab52212 detects endogenous levels of SYK but only when phosphorylated at Tyr348 (human) and

Tyr342 (mouse and rat).

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.

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found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

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

バッファー pH: 7

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

Without Mg+2 and Ca+2

精製度 Immunogen affinity purified

一次抗体 備考 ab52212 detects endogenous levels of SYK but only when phosphorylated at Tyr348 (human) and

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Tyr342 (mouse and rat).

ポリ/モノ

ポリクローナル

アイソタイプ

ΙgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab52212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
IHC-P		Use at an assay dependent concentration.

ターゲット情報

機能

Non-receptor tyrosine kinase which mediates signal transduction downstream of a variety of transmembrane receptors including classical immunoreceptors like the B-cell receptor (BCR). Regulates several biological processes including innate and adaptive immunity, cell adhesion, osteoclast maturation, platelet activation and vascular development. Assembles into signaling complexes with activated receptors at the plasma membrane via interaction between its SH2 domains and the receptor tyrosine-phosphorylated ITAM domains. The association with the receptor can also be indirect and mediated by adapter proteins containing ITAM or partial hemITAM domains. The phosphorylation of the ITAM domains is generally mediated by SRC subfamily kinases upon engagement of the receptor. More rarely signal transduction via SYK could be ITAM-independent. Direct downstream effectors phosphorylated by SYK include VAV1, PLCG1, PI-3-kinase, LCP2 and BLNK. Initially identified as essential in B-cell receptor (BCR) signaling, it is necessary for the maturation of B-cells most probably at the pro-B to pre-B transition. Activated upon BCR engagement, it phosphorylates and activates BLNK an adapter linking the activated BCR to downstream signaling adapters and effectors. It also phosphorylates and activates PLCG1 and the PKC signaling pathway. It also phosphorylates BTK and regulates its activity in B-cell antigen receptor (BCR)-coupled signaling. In addition to its function downstream of BCR plays also a role in T-cell receptor signaling. Plays also a crucial role in the innate immune response to fungal, bacterial and viral pathogens. It is for instance activated by the membrane lectin CLEC7A. Upon stimulation by fungal proteins, CLEC7A together with SYK activates immune cells inducing the production of ROS. Also activates the inflammasome and NFkappa-B-mediated transcription of chemokines and cytokines in presence of pathogens. Regulates neutrophil degranulation and phagocytosis through activation of the MAPK signaling cascade. Also mediates the activation of dendritic cells by cell necrosis stimuli. Also involved in mast cells activation. Also functions downstream of receptors mediating cell adhesion. Relays for instance, integrin-mediated neutrophils and macrophages activation and P-selectin receptor/SELPG-mediated recruitment of leukocytes to inflammatory loci. Plays also a role in nonimmune processes. It is for instance involved in vascular development where it may regulate blood and lymphatic vascular separation. It is also required for osteoclast development and function. Functions in the activation of platelets by collagen, mediating PLCG2 phosphorylation and activation. May be coupled to the collagen receptor by the ITAM domain-containing FCER1G. Also activated by the membrane lectin CLEC1B that is required for activation of platelets by PDPN/podoplanin. Involved in platelet adhesion being activated by ITGB3 engaged by fibrinogen.

組織特異性

Widely expressed in hematopoietic cells (at protein level). Within the B-cells compartment it is for

instance expressed for pro-B-cells to plasma cells.

配列類似性 Belongs to the protein kinase superfamily. Tyr protein kinase family. SYK/ZAP-70 subfamily.

Contains 1 protein kinase domain.

Contains 2 SH2 domains.

ドメイン The SH2 domains mediate the interaction of SYK with the phosphorylated ITAM domains of

transmembrane proteins. Some proteins like CLEC1B have a partial ITAM domain (also called

hemITAM) containing a single YxxL motif. The interaction with SYK requires CLEC1B

homodimerization.

翻訳後修飾 Ubiquitinated by CBLB after BCR activation; which promotes proteasomal degradation.

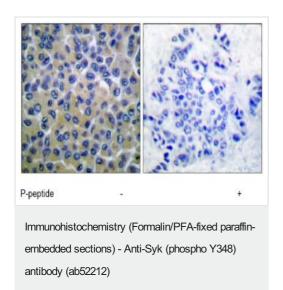
Autophosphorylated. Phosphorylated on tyrosine residues by LYN following receptors engagement. Phosphorylation on Tyr-323 creates a binding site for CBL, an adapter protein that serves as a negative regulator of BCR-stimulated calcium ion signaling. Phosphorylation at Tyr-348 creates a binding site for VAV1. Phosphorylation on Tyr-348 and Tyr-352 enhances the phosphorylation and activation of phospholipase C-gamma and the early phase of calcium ion mobilization via a phosphoinositide 3-kinase-independent pathway (By similarity).

Phosphorylation on Ser-297 is very common, it peaks 5 minutes after BCR stimulation, and creates a binding site for YWHAG. Phosphorylation at Tyr-630 creates a binding site for BLNK.

Dephosphorylated by PTPN6.

細胞内局在 Cell membrane. Cytoplasm, cytosol.

画像



Paraffin-embedded human breast carcinoma tissue stained with ab52212 (1/100). The right hand panel represents a negative control, where ab52212 was pre-incubated with the immunising (blocking) peptide.

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