

An Affymetrix Company

Anti-Human Syk Purified

Catalog Number: 14-6696

RUO: For Research Use Only. Not for use in diagnostic procedures.

Immunoblotting of reduced Ramos cell lysate with 5 ug/mL of Anti-Human Syk antibody. Bands were visualized using Anti-Rat IgG HRP.

Product Information

Contents: Anti-Human Syk Purified

REF Catalog Number: 14-6696

Clone: 4D10.1

Concentration: 0.5 mg/mL

Host/Isotype: Mouse IgG2a, kappa



Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer **Temperature Limitation:** Store at 2-8°C.



Use By: Refer to vial

Description

This 4D10.1 monoclonal antibody recognizes human Syk, a 72-kDa member of the Syk/ZAP-70 family of nonreceptor protein tyrosine kinases. Syk is expressed most highly in B cells, with lower expression in immature thymocytes, mast cells, and platelets. Syk can also be detected in fibroblasts, epithelial cells, hepatocytes, endothelial cells, and neuronal cells. This protein is a major component of signaling cascades downstream of the B and T cell antigen receptors and plays an essential role in lymphocyte development. Upon recruitment to immunoreceptor tyrosine-based activation motifs (ITAMs) on the antigen receptors, Syk is activated by phosphorylation on multiple tyrosines. Once activated, Syk phosphorylates proteins such as phospholipase C gamma and BLNK/SLP-65. Finally, abnormal Syk expression has been linked to tumor cell migration and invasion in several cancers.

Applications Reported

This 4D10.1 antibody has been reported for use in flow cytometric analysis and western blotting.

Applications Tested

This 4D10.1 antibody has been tested by immunoblotting of reduced Ramos cell lysate. This can be used at less than or equal to 5 ug/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Geahlen RL. Syk and pTyr'd: Signaling through the B cell antigen receptor. Biochim Biophys Acta. 2009 Jul;1793(7):1115-27.

Luangdilok S, Box C, Patterson L, Court W, Harrington K, Pitkin L, Rhys-Evans P, O-charoenrat P, Eccles S.Syk tyrosine kinase is linked to cell motility and progression in squamous cell carcinomas of the head and neck. Cancer Res. 2007 Aug 15;67(16):7907-16. (4D10.1, IHC, WB)

Chu DH, van Oers NS, Malissen M, Harris J, Elder M, Weiss A. Pre-T cell receptor signals are responsible for the down-regulation of Syk protein tyrosine kinase expression. J Immunol. 1999 Sep 1;163(5):2610-20. (4D10.1, FC, WB)

Chu DH, Spits H, Peyron JF, Rowley RB, Bolen JB, Weiss A. The Syk protein tyrosine kinase can function



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independently of CD45 or Lck in T cell antigen receptor signaling. EMBO J. 1996 Nov 15;15(22):6251-61.

Related Products

14-4724 Mouse IgG2a K Isotype Control Purified

Lega

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