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ProductInformation

Lyn A
Human, Recombinant
Expressed in Insect Cells

Product Number **L 9913**
Storage Temperature –70 °C

Product Description

Human recombinant Lyn A is a 56 kDa protein that is histidine-tagged at the carboxyl terminus. It is expressed in insect cells by recombinant baculovirus.

The Lyn protein is a member of the Src family of non-receptor-associated protein-tyrosine kinases. Lyn A differs from LynB in having an additional 21 amino acids at the amino terminus. Both forms have comparable kinase activity *in vitro*.[1] The Src protein tyrosine kinases control a variety of cellular processes ranging from proliferation and differentiation to motility and adhesion.[2] Lyn undergoes a concentration-dependent autophosphorylation at Tyr^{397} that relieves conformational constraint, thus activating the catalytic site and decreasing the accessibility of the SH2 domain.[3] Lyn phosphorylates and activates the carboxyl terminal tyrosine residues of Tec, a non-receptor tyrosine kinase that is coexpressed with Lyn and acts downstream of Lyn in intracellular signaling pathways.[4] Lyn down-regulates the proapoptotic function of growth arrest-DNA damage 34 (GADD34).[5] It is required for normal stem cell factor-mediated responses of primary hemopoietic progenitor cells,[6] for normal mast cell function, and for immunoglobulin-mediated immune cell signaling.[7]

Reagent

Recombinant human Lyn A is supplied as a solution in 50mM TrisHCl, pH 7.5, 0.05mM EDTA, 1mM DTT, 100mM NaCl, 0.05% Nonidet P-40, and 50% glycerol.

Precautions and Disclaimer

For laboratory use only. Not for drug, household or other uses.

Storage/Stability

After thawing store the Lyn A stock solution in single-use aliquots at –20 °C. Avoid multiple freeze-thaw cycles.

References

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4. Mano, H., et al., Tec protein-tyrosine kinase is an effector molecule of Lyn protein-tyrosine kinase. FASEB J., **10**, 637-642 (1996).
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7. Hibbs, M. L., et al., Multiple defects in the immune system of Lyn-deficient mice, culminating in autoimmune disease. Cell, **83**, 301-311 (1995).

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