

PRODUCT INFORMATION

LAT (Phospho-Tyr¹⁹¹)-biotin Peptide (trifluoroacetate salt)

Item No. 44661

Synonyms:	Biotin-LAT (Phospho-Tyr ¹⁹¹) Peptide, LAT (Phospho-Tyr ²²⁰)-biotin Peptide, Linker for Activation of T Cells (Phospho-Tyr ¹⁹¹)-biotin Peptide	
Peptide Sequence:	Biotin-SLDFSRE-pY-VNVSQELH-OH	Biotin—Ser—Leu—Asp—Gly—Ser—Arg—Glu—Tyr(PO ₃ H ₂)—Val—Asn— Val—Ser—Gln—Glu—Leu—His—OH
MF:	C ₈₇ H ₁₃₆ N ₂₅ O ₃₄ PS • XCF ₃ COOH	
FW:	2,139.2	• XCF ₃ COOH
Purity:	≥98%	
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

LAT (phospho-Tyr¹⁹¹)-biotin peptide (trifluoroacetate salt) is supplied as a solid. Aqueous solutions of LAT (phospho-Tyr¹⁹¹)-biotin peptide (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. LAT (phospho-Tyr¹⁹¹)-biotin peptide (trifluoroacetate salt) is slightly soluble (0.1-1 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

LAT (phospho-Tyr¹⁹¹)-biotin peptide is a biotinylated peptide corresponding to amino acids 185 to 200 or 213 to 228 of the short and long splice variants, respectively, of linker for activation of T cells (LAT).^{1,2} LAT is a transmembrane adaptor protein that is subject to phosphorylation at Tyr¹⁹¹/Tyr²²⁰ by ZAP-70 and spleen tyrosine kinase (Syk) upon T cell receptor (TCR) activation, and this phosphorylation facilitates phospholipase C γ 1 (PLC γ 1) binding and further signaling events.¹ This product can be used in the detection of antibodies targeting LAT (phospho-Tyr¹⁹¹) in biological samples.

References

1. Wange, R.L. LAT, the linker for activation of T cells: a bridge between T cell-specific and general signaling pathways. *Sci. STKE* **2000(63)**, re1 (2000).
2. Zhang, W., Sloan-Lancaster, J., Kitchen, J., *et al.* LAT: The ZAP-70 tyrosine kinase substrate that links T cell receptor to cellular activation. *Cell* **92(1)**, 83-92 (1998).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/06/2026

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM