



ChemBridge Corporation
16981 Via Tazon, Suite G
San Diego, CA. 92127

Certificate of Analysis

SYK, 10 µg

Recombinant Human Spleen Tyrosine Kinase, Histidine-tagged
Cat Number: BIOTK-SYK
Lot Number: 3-08

Send inquiries & orders to:
e-mail: support@chembridge.com
Phone: (858) 451-7400; Option 4,
Fax: (858) 451-7401

Description:

Recombinant Human Full-Length protein, Histidine-tagged, expressed in insect cells. No special measures were taken to activate this kinase.

Specific Activity:

116 nmole of phosphate transferred to Poly E₄Y peptide substrate (Sigma, P0275) per minute per mg of total protein at 30°C. Activity determined at a final protein concentration of 1.24 µg/mL.

Protein Concentration:

0.15 mg/mL total protein as measured using the Bradford protein assay with BSA as a standard.

Storage and Handling:

Store at -80°C for long time. At first use, aliquot and to avoid multiple freeze-thaw cycles. If properly stored at -80°C, this product is guaranteed for 12 months from date of purchase. **Protein stable for 6 months at -20°C, for 3-5 h at 4°C and not stable at room temperature.**

Storage Buffer:

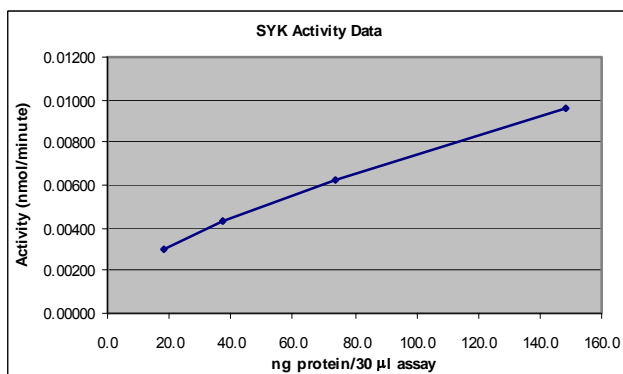
50 mM Tris (pH 7.5), 150 mM NaCl, 0.02% Triton® X-100, 2 mM DTT, 50% Glycerol

Enzyme Dilution Buffer:

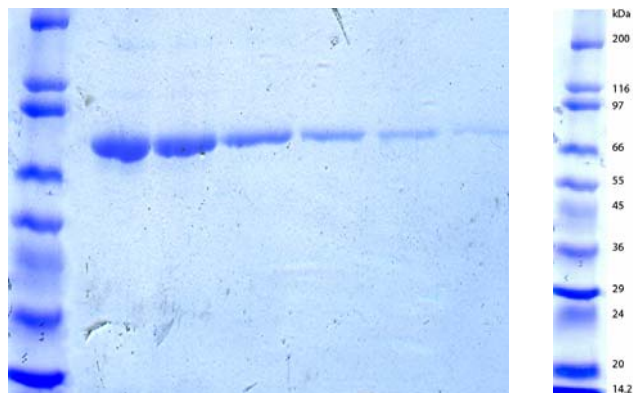
50 mM Tris (pH 7.5), 10% Glycerol, 0.02% Triton® X-100, 0.1 mg/mL BSA, 0.5 mM Na₃VO₄, 2 mM DTT

Quality Assurance

Activity Graph:



PAGE Description:



The SDS-PAGE was run on a 10 well 4-20% Tris-Glycine Novex gel (Catalog #: EC6025BOX).

Lane 1: SigmaMarker, Wide Range, Molecular Weight (Catalog#: S8445, Sigma)

Lane 2: 2 µg SYK

Lane 3: 1 µg SYK

Lane 4: 0.5 µg SYK

Lane 5: 0.25 µg SYK

Lane 6: 0.125 µg SYK

Lane 7: 0.0625 µg SYK

Assay Conditions:

The enzyme was pre-diluted in enzyme dilution buffer and assayed in 50 mM Tris (pH 7.5), 0.01% Tween-20, 5 mM MgCl₂, 5 mM MnCl₂, 0.5 mM Na₃VO₄, 2 mM DTT, 10 µM ATP, 50 µg Poly E₄Y peptide substrate per reaction and trace [³²P]-γ-ATP for 10 minutes at 30°C.

Purity:

≥90% as determined by a Coomassie blue-stained SDS-PAGE gel.

Molecular Weight:

78 kDa calculated from the sequence below.

Protein Sequence:

MSYHHHHHH	DYDIPTTENL	YFQGAMGSAS	SGMADSANHL	PPFFGNITRE	EAEDYLVQGG	MSDGLYLLRQ	SRNYLGGFAL	SVAHGRKAHH	YTIERELNGT	100
YAIAGGRTHA	SPADLCHYHS	QESDGLVCLL	KKPFNRQGV	QPKTGFEDL	KENLIREYVK	QTWNLQGQAL	EQAIISQKPQ	LEKLIATTAH	EKMPWFHGKI	200
SREESEQIVL	IGSKTNGKFL	IRARDNNGSY	ALCLLHEGKV	LHYRIDKDKT	GKLSIPEGKK	FDTLWQLVEH	YSYKADGLLR	VLTVPCQKIG	TQGNVNFVGG	300
PQLPGSHPAT	WSAGGIISRI	KSYSFPKPGH	RKSSPAQGNR	QESTVSFNPY	EPELAPWAAD	KGPQREALPM	DTEVYESPYA	DPEEIRPKEV	YLDRKLLTLE	400
DKELGSGNFG	TVKKGYYQMK	KVVKTVAVKI	LKNEANDPAL	KDELLAEANV	MQQLDNPYIV	RMIGICEAES	WMLVMEMAEI	GPLNKYLQQN	RHVKDKNIIIE	500
LVHQVSMGMK	YLEESNFVHR	DLAARNVLLV	TQHYAKISDF	GLSKALRADE	NYKKAQTHGK	WPVKWYAPEC	INYYKFSSKS	DVWSFGVLMW	EAFSYGQKPY	600
RGMKGSEVTA	MLEKGERMGC	PAGCPREMYD	LMNLCWTYDV	ENRPGFAAVE	LRLRNYYYDV	VNSTLVAAAF	ESRACSLAEC	GTKLVEKY.		689

2-635 amino acids from SYK (GenBank Accession Number NP_003168) in bold.