

Product Information

Hck, Human, recombinant

Product Number **H 7786**
Storage Temperature -70°C

Product Description

Human Hck is a histidine-tagged 58 kDa membrane associated protein expressed in insect cells by recombinant baculovirus.

Hck is a member of the Src family of non-receptor-associated protein-tyrosine kinases. The Src protein tyrosine kinases control a variety of cellular processes ranging from proliferation, differentiation, motility, adhesion, and transcription.¹ They are also involved in control of cell survival and angiogenesis.² Hck in particular is known to play an important role in the activation of macrophages.³ Due to its close association with secretory lysosomes, Hck can be used as an effective tool in fusion dynamic studies involving lysosomal compartments.⁴

Specific Activity: minimum 350 units/mg protein

Unit Definition: One unit will transfer 1 nanomole of phosphate per minute using polyE4Y as the substrate at pH 7.5 at 30°C .

The product is supplied as a solution of 50 mM Tris-HCl, pH 7.5, containing 0.05 mM EDTA, 1 mM DTT, 100 mM NaCl, 0.05% NP-40, and 50% glycerol.

Precautions and Disclaimer

This product is for laboratory use only. Please consult the Material Data Safety Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and it is recommended to store the product at -70°C . After thawing, store the solution as aliquots at -20°C . Avoid repeated freeze-thaw cycles.

References

1. Tatosyan, A.G., and Mizenina, O.A., Kinases of the Src family: structure and functions. *Biochemistry (Mosc.)*, **65**, 49-58 (2000).
2. Schlessinger, J., New roles for Src kinases in control of cell survival and angiogenesis. *Cell*, **100**, 293-296 (2000).
3. Choi, K.S., et al., Role of Hck in the pathogenesis of encephalomyocarditis virus-induced diabetes in mice. *J. Virol.*, **75**, 1949-1957 (2001).
4. Astarie-Daqueker, C., The protein tyrosine kinase Hck is located on lysosomal vesicles that are physically and functionally distinct from CD63-positive lysosomes in human macrophages. *J. Cell Sci.*, **115**, 81-89 (2002).

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