DADEY(PO_3)LIPQQG
Tyrosine Phosphatase Substrate I

Catalog Number: ES006
Lot Number: HXY11

Specifications and Use

Sequence	♦ Asp-Ala-Asp-Glu-Tyr(PO_3)-Leu-Ile-Pro-Gln-Gln-Gly ♦ Synthetic phosphopeptide corresponding to amino acids 988 - 998 of the mature EGF receptor (EGF R, Accession # AF288738). ♦ Derived from an autophosphorylation site at Y992 of EGF R.
Molecular Mass	♦ 1328.32 Da
Purity	♦ >95% based on HPLC analysis.
Peptide Content	♦ 81.4%
Quantity	♦ 1 mg.
Formulation	♦ Lyophilized from a stock solution in distilled water.
Reconstitution	♦ Dissolves in water. ♦ 61.3 µL gives a stock solution of substrate at 10 mM concentration.
Shipping	♦ The protein is shipped ambient. Upon receiving, store it immediately at the temperature recommended below.
Storage	♦ Lyophilized samples are stable for up to twelve months from date of receipt at -20° C to -70° C. ♦ Upon reconstitution, the substrate can be stored at 2° - 8° C for one month or at -20° to -70° C **in a manual defrost freezer** for three months. ♦ Protect from exposure to direct light. ♦ **Avoid repeated freeze-thaw cycles.**

Tyrosine Phosphatase Substrate I

This phosphopeptide is a substrate for a variety of protein tyrosine phosphatases (PTPs), including PTP1B (R&D Systems, Catalog # 1366-PT), *Yersinia* PTP, and SHP-2. Enzymatic cleavage of this substrate liberates inorganic phosphate, which can be measured in dye binding assays, such as the malachite green method.

References:

1. Zhang, Z.Y. *et al*. (1993) Proc. Natl. Acad. Sci. USA **90**:4446.
2. Peters, G.H. *et al*. (2000) J. Biol. Chem. **275**:18201.
3. Sarmiento, M. *et al*. (1998) J. Biol. Chem. **273**:26368.
4. Sugimoto, S. *et al*. (1993 J. Biol. Chem. **268**:22771.
5. Van Veldhoven, P.P. and G.P. Mannaerts (1987) Anal. Biochem. **161**:45.

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