Shrimp Alkaline Phosphatase (rSAP)
Pandalus borealis recombinant, Pichia pastoris

**Cat. No.** | **Amount**  
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EN-174S | 400 Units  
EN-174L | 5 x 400 Units  

**Unit Definition:** One unit of rSAP releases 1 µmol phosphate/min from 4-nitrophenyl phosphate in 0.1 M glycine-NaOH pH 10.4, 1 mM MgCl₂, 1 mM ZnCl₂ and 6 mM 4-nitrophenyl phosphate.

*For in vitro use only!*

**Shipping:** shipped on blue ice  
**Storage Conditions:** store at -20 °C  
**Shelf Life:** 12 months  
**Purity:** > 95 % (SDS-PAGE)  
**Form:** liquid  
**Concentration:** 1 unit/µl

**Description:**  
Recombinant Shrimp Alkaline Phosphatase is a multipurpose alkaline phosphatase that can be fully inactivated by a short heat treatment. This property simplifies most workflows involving alkaline phosphatase treatment. The recombinant form of SAP replaces the native form that has been established on the market for several years. rSAP has all the properties of the well proven SAP, but with additional benefits. rSAP is far more stable at ambient temperature, it is of high, consistent purity, and is available in large batches at high concentration.

- Heat-labile, all-purpose alkaline phosphatase  
- Fast and easy dephosphorylation of DNA, RNA and nucleotides  
- Active in most restriction enzyme buffers, no need for extra addition of buffer or ions  
- Excellent stability at 4°C and even room temperature

**Heat inactivation:**  
rSAP is completely inactivated by a 5 min incubation at 65 °C.

**Absence of contaminants:**  
Tested for the absence of exonucleases, endonucleases and Rnases.

**Activity:**  
> 2000 units/mg  
Optimum working range is between pH 7-9. rSAP is active in most restriction- and PCR-buffers. Mg²⁺ (>1 mM) is required for activity.

**Related Products:**  
Exonuclease I, #EN-177  
SAP-Exo Kit, #PP-218

**Selected References:**  
