

DATA SHEET



Shrimp Alkaline Phosphatase (rSAP)

Pandalus borealis
recombinant, *Pichia pastoris*

Cat. Nº.	Amount
<input type="checkbox"/> ENZ-111XS	500 units
<input checked="" type="checkbox"/> ENZ-111S	2 x 500 units (1.000 U)
<input type="checkbox"/> ENZ-111M	5 x 500 units (2.500 U)
<input type="checkbox"/> ENZ-111L	10 x 500 units (5.000 U)

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 MgCl_2 , 1 mM ZnCl_2 and 6 mM 4-nitrophenyl phosphate.

Concentration:
1 units/ μL

Activity:
> 2000 units/mg
Optimum working range is between pH 7-9. rSAP is active in most restriction- and PCR-buffers. Mg^{2+} (>1 mM) is required for activity.

For *in vitro* use only!

Shipping:
Shipped on blue ice

Storage Conditions:
Store at -20 °C
Storage at 4 °C possible for at least 6 months and 3 months at 25 °C.

Shelf Life:
12 months

Purity:
> 95 % (SDS-PAGE)

Form:
Liquid

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.

Protocol for PCR cleanup

- Add 1.0 μL of rSAP and 0.5 μL of Exonuclease I to 5 μL of PCR product
- Incubate for 10 minutes at 37 °C
- Inactivate for 10 minutes at 80 °C
- PCR products are ready for downstream application

Related Products:

Exonuclease I - #ENZ-100
EXO + SAP Kit - #DPK-100