

ENGLISH

S-2302™

For Laboratory Use Only
For General Laboratory Use

S-2302™

S-2302 is a chromogenic substrate for plasma kallikrein.

COMPOSITION
Each vial contains chromogenic substrate S-2302 25 mg and mannitol 60 mg as a bulking agent.

PRECAUTIONS AND WARNINGS:

Hazard class: None

Hazard statements: None

Precautionary statements: None

Supplemental Hazard Information: Up to 2.9% of the mixture consists of component of unknown acute toxicity (oral, dermal, inhalation) for the human health and unknown hazard to the aquatic environment.

CHEMISTRY

Chemical name: H-D-Prolyl-L-phenylalanyl-L-arginine-p-nitroaniline dihydrochloride.

Formula: H-D-Pro-Phe-Arg-pNA · 2 HCl

Mol. wt: 611.6

$\epsilon_{316 \text{ nm}^2}$: $1.27 \cdot 10^4 \text{ mol}^{-1} \cdot \text{L} \cdot \text{cm}^{-1}$

Solubility: > 10 mmol/L in H₂O

Stability: Substance: Stable until expiry date if stored at 2-8°C. Avoid exposure to light. The substance is hygroscopic and should be stored dry.

Solution: 4 mmol/l in H₂O is stable for more than 6 months at 2-8°C.

Contamination by microorganisms may cause hydrolysis.

Suitable stock

solution: 4 mmol/L in H₂O.

PRINCIPLE

Enzyme

H-D-Pro-Phe-Arg-pNA $\xrightarrow{\text{Enzyme}}$ H-D-Pro-Phe-Arg-OH + pNA

The method for the determination of activity is based on the difference in absorbance (optical density) between the pNA formed and the original substrate. The rate of pNA formation, i.e. the increase in absorbance per second at 405 nm, is proportional to the enzymatic activity and is conveniently determined with a photometer.

CHROMOGENIX



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