

## DATA SHEET

**S-2238 is a Chromogenic substrate for thrombin.**

### COMPOSITION

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

### CHEMISTRY

Formula: H-D-Phe-Pip-Arg-pNA•2HCl

Molecular weight: 625.6

Solubility: > 10 mmol/l in H<sub>2</sub>O

#### 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 H<sub>2</sub>O is stable for more than 6 months at 2-8°C. Contamination by microorganisms may cause hydrolysis.

Suitable stock solution: 4 mmol/l in H<sub>2</sub>O.

### PRINCIPLE

#### Enzyme

H-D-Pro-Phe-Arg-pNA----->H-D-Pro-Phe-Arg OH+pNA(yellow)

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.

### APPLICATIONS

The substrate has been used for the determination of:

1. Thrombin activity

**For In-Vitro Diagnostic Use. Not For Human Or Animal Consumption.**