



## Thrombin Substrate – 25 mg

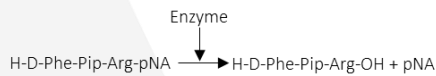
### For In Vitro Research Use – Not For Diagnostic Use

AY238 Thrombin Substrate is a chromogenic substrate for Thrombin. Suitable for determination of Heparin in Anti-FIIa activity assays.

#### COMPOSITION

Each vial contains 25 mg of the chromogenic substrate H-D-Phe-Pip-Arg-pNA · 2 HCl and mannitol 40 mg as bulking agent.

#### PRINCIPLE



The difference in absorbance between the original substrate and the free pNA formed by enzyme cleavage can be used for quantification of enzyme activity. The rate of pNA formation, i.e the increase in absorbance per second at 405 nm, is proportional to the enzymatic activity.

#### PREPARATION

Reconstitute in H<sub>2</sub>O or buffer according to specific assay protocols. Reconstitution in 10 mL of H<sub>2</sub>O results in a substrate concentration of 4 mmol/L.

#### CHEMISTRY

Chemical name	H-D-Phenylalanyl-L-pipecolyl-L-arginine-p-nitroaniline-dihydrochloride
Formula	H-D-Phe-Pip-Arg-pNA · 2 HCl
Molecular Weight	625.6 g / mol
$\epsilon_{316 \text{ nm}}$	$1.27 \cdot 10^4 \text{ mol}^{-1} \cdot \text{L} \cdot \text{cm}^{-1}$
Solubility	> 10 mmol/L in H <sub>2</sub> O

#### STORAGE

Store at 2-8°C in unopened original vial. Avoid exposure to light. The substance is hygroscopic and should be stored dry.

#### STABILITY

##### Lyophilized in unopened original vial:

Stable at 2-8°C until expiry date printed on the product label.

##### After reconstitution in 10 mL H<sub>2</sub>O, stored in original vial, and provided any contamination or evaporation are avoided:

7 days at 18-25°C

6 months at 2-8°C.

6 months at < -20°C.

Contamination by microorganisms or proteases may cause hydrolysis of the substrate resulting in a yellow solution. Discard the substrate if it turns yellow during storage.

#### SYMBOLS USED



Catalog number



Batch code



Use by



Temperature limitation

#### HAZARDS

Upon assessment, this product is not classified as hazardous according to Regulation (EC) No 1272/2008.

Country manufacture

Sweden

