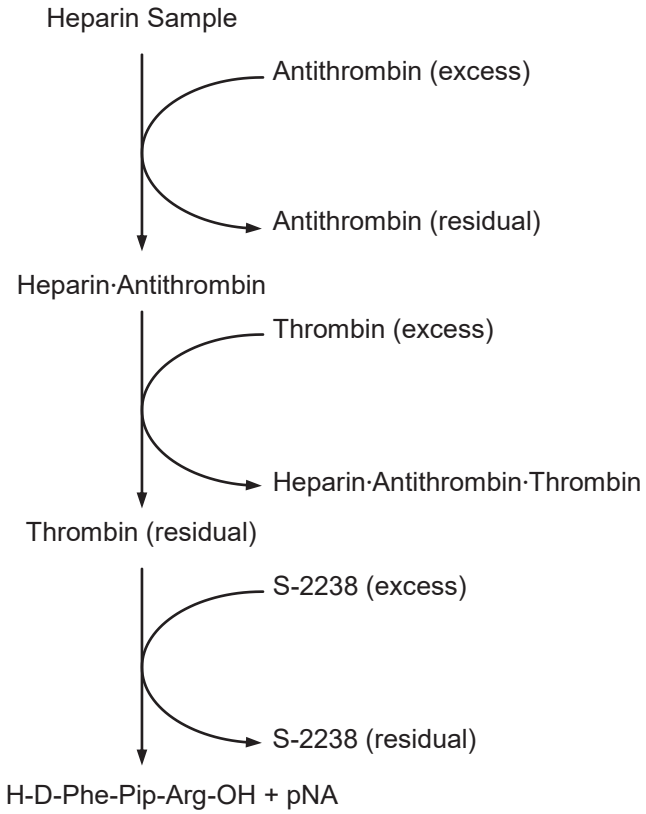
Chromogenic Assay Reagents

for anti-FIIa and anti-FXa assays of heparins

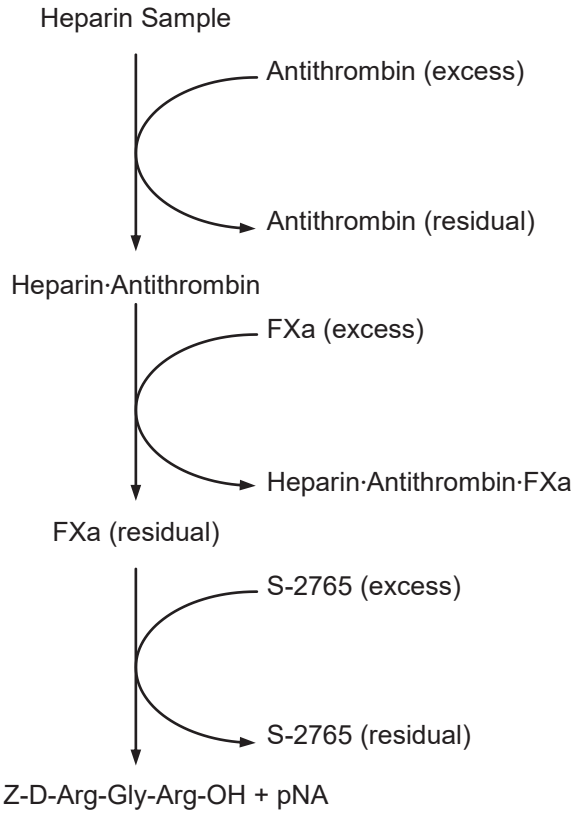
Anti-FIIa and anti-FXa activities are two biochemical potencies of heparins and can be determined by chromogenic assays.

Asnail now offers extensive reagents for chromogenic assays of heparins.

Principle



Anti-FIIa Assay



Anti-FXa Assay

The resulting chromophore, p-nitroaniline (pNA), can be measured at 405 nm wavelength. The potency of heparin therefore can be calculated by the parallel-line assay method.

Specifications

	S-2238	S-2765	S-2222
CAS Number	113711-77-6	115388-96-0	-
EC Number	4.2.2.7		4.2.2.8
Molecular Weight	625.6 Da	714.6 Da	741.3 Da
Purity (HPLC)	> 99.5%	> 99.5%	> 99.5%
Impurities (OD_{405})	≤ 0.120 [L/(g·cm)]	≤ 0.120 [L/(g·cm)]	≤ 0.120 [L/(g·cm)]
Solubility in Water	> 10 mg/mL	> 10 mg/mL	> 10 mg/mL

	Activated Factor X	Alpha-Thrombin	Antithrombin
Abbreviation	FXa	FIIa	AT
Origin	Bovine Plasma	Bovine Plasma	Human Plasma
Molecular Weight	~ 44 kDa	~ 36 kDa	~ 56 kDa
Purity (SDS-PAGE)	> 95%	> 95%	> 95%
Specific Activity	> 90 IU/mg	> 700 IU/mg	> 6 IU/mg

Applications

⇒ Anti-factor Xa activity and anti-factor IIa activity ratios of heparin and LMWHs

⇒ Determination of antithrombin, thrombin, FXa or FVIIIa activity in plasma

Order information

Catalog #	Description	Qty.
AS00-0101	S-2238, Chromogenic Substrate for Thrombin	25 mg/Vial
AS00-0102	S-2765, Chromogenic Substrate for Factor Xa	25 mg/Vial
AS00-0103	S-2222, Chromogenic Substrate for Factor Xa	25 mg/Vial
AG00-0121	Activated Factor X (FXa), from Bovine Plasma	2.5 IU/Vial
AG00-0122	Alpha-Thrombin (FIIa), from Bovine Plasma	50 IU/Vial
AG00-0132	Antithrombin (AT), from Human Plasma	10 IU/Vial

NOTE: for bulk chromogenic substrates, please contact Asnail.