Enzyme Research Laboratories
Global Coag

TISSUE FACTOR PATHWAY

(Extrinsic Pathway)

"Tissue Damage"

Tissue Factor

VIIa

VII

TFPI

ZPI

XIa

(VIIa)

Ca++

IX

IXa

X

Ca++
PL

Xa

ZPI

PZ

Ca++
PL

VIII

IIa

VIIIa

Ca++
PL

Va

II

V

IIa

IIa

Antithrombin

Heparin Cofactor II

Fibrinogen

Fibrin Monomer

Fibrin Polymer

XIII

IIa

XIIIa

Ca++

Fibrin Clot

Protein S

Protein S

APC

Protein C Inhibitor

IIa

Thrombomodulin

Protein C

C-1 inhibitor

CONTACT FACTOR PATHWAY

(Intrinsic Pathway)

Kallikrein

Prekallikrein

HK

HK

XII

(VIIa)

XIIa

XI

Ca++

FIBRINOLYSIS

Plasminogen

UK, SK
tPA

PAI-1

Plasmin

α-2 Antiplasmin

FXDP
FDP

IIa

TAFI

Protein Concentrations

Component	Molecular Weight	Plasma Concentration µg/ml	Plasma Concentration µM
Fibrinogen (I)	330,000	3000	9.09
Prothrombin (II)	72,000	90	1.388
Factor V	330,000	10	0.03
Factor VII	50,000	0.5	0.01
Factor VIII	330,000	0.1	0.0003
Factor IX	56,000	5	0.08928
Factor X	58,800	8	0.13605
Factor XI	160,000	5	0.031
Factor XII	80,000	30	0.375
Factor XIII	320,000	10	0.03125
Protein C	62,000	4	0.0645
Protein S	69,000	10(free)	0.1449
Protein Z	62,000	2.2	0.0355
Prekallikrein	86,000	50	0.5814
HK	110,000	70	0.6363
Fibronectin	450,000	300	0.6667
Antithrombin III	58,000	140**	2.4**
Plasminogen	90,000	216	2.4
Urokinase	53,000	0.1	0.001887
Heparin Cofactor II	66,000	90	1.3636
Alpha$_2$-Antiplasmin	63,000	60	0.9524
Protein C Inhibitor	57,000	4	0.0702
Alpha$_2$-Macroglobulin	725,000	2100	2.8966

Inhibitors in black
**Thrombophilia gene mutation*
***Corrected value*

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