

One Company

Two Solutions



**Haematologic
Technologies**

INCORPORATED

Proteins, antibodies
and related products
for coagulation research



**Haemtech
Biopharma**

SERVICES

GMP-compliant,
QC testing for protein
biotherapeutics

YAREWELL
BIOTECHNOLOGY

Purified Proteins

Better quality = Better Results

>95% pure, fully functional and guaranteed.* Multi-species, active site-blocked, and conjugated versions available. Custom purification available upon request.



Factor VII & VIIa	RVVV/RV VX/E. Carinatus	TAFI	Thrombospondin
Factor IX & IXa	Factor V & Va	Angiostatin	Vitronectin
Factor X & Xa	Fibronectin	Alpha-2-antiplasmin	R. Tissue Factor
Factor XI & XIa	Protein S	Protein Z	Bovine Lactadherin
Factor XII	Thrombomodulin	Fibrinogen	Osteocalcin
Factor XIII & XIIIa	vWF & vWF VIII-free	Beta-2-glycoprotein 1	Phospholipids
Plasminogen & Plasmin	Heparin Cofactor II	Osteonectin	Fluorogenic substrates
Protein C & aPC	Antithrombin III	Platelet factor 4	CMK-protease inhibitors
Prothrombin & Thrombin	Corn Trypsin Inhibitor**	Beta-thromboglobulin	DAPA

* Up to the expiration data on the product data sheet

** CTI blood collection tubes available

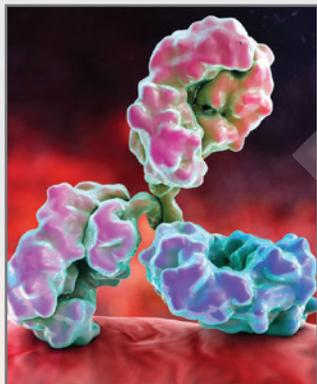
One Company

Two Solutions

Antibodies

For blot, ELISA, purification & more

A full complement of monoclonal and polyclonal antibodies against human and bovine coagulation proteins. Custom conjugated* and affinity purified versions are available.



Anti Factor V & Va

Anti-Factor VII

Anti-Factor VIII

Anti-Factor IX & IXa

Anti-Factor X

Anti-Factor XI

Anti-Factor XII

Anti-Factor XIII

Anti-Plasminogen

Anti-Prothrombin

Anti-Thrombin

Anti-Protein C

Anti-Protein S

Anti-Osteonectin

Anti-Osteocalcin

Anti-TAFI

Anti-TFPI

Anti-Antithrombin

Anti-vWF

Anti-Tissue Factor

Anti-Protein Z

Anti-Heparin Cofactor II

Anti-Fibrinogen

...and more!

* FITC, HRP, biotin and custom conjugates available for special orders. Coupled sepharose also available.



**Haematologic
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• 802.878.1777

Factor Deficient Plasmas

Without the IVD cost

For research use only, our factor deficient plasmas are immunodepleted, have a normal range of remaining factors, and are calibrated against IVD plasmas to ensure equivalent performance – all for about ½ the cost of IVD deficient plasma.



Prothrombin deficient

Factor X deficient

Factor V deficient

Factor XI deficient

Factor VII deficient

Factor XII deficient

Factor VIII deficient*

Antithrombin deficient

Factor IX deficient

Double deficient plasma**

* Chemically depleted. CRIM+

** Custom manufacture only

One Company

Two Solutions

Custom Blood and Sample Collection Tubes

To your specifications

Create customized collection tubes for your clinical research studies. Manufactured to your specifications with contents that are specific to your needs.



Various tube sizes, styles, and vacuum draws

Screw-cap vials available

Liquid or lyophilized formulations that you create

Batch sizes as small as one

Quick turn around

Non-sterile, research use only



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Analytical Testing for IVIG Drug Products

From R&D through validated assays for lot release, we offer a myriad of analytical methods to assess the identity, purity, and potential safety of your IVIG drug product to meet current regulatory requirements.



Methods for IVIG include:

Thrombin generation assays	Factor XIa	Protein G HPLC	PKA
Total protein	Na-Caprylate	Glycine	Hemagglutination (Anti-A & B)
Plasmin	Plasminogen	Anti-complement	Osmolality
Anti-D antibodies	Fc Function Test	NAPTT	pH
IgM Assay	Fibrinogen	IgG Sub-Class Characterization	
IgA Assay	SDS-PAGE	Size exclusion HPLC	

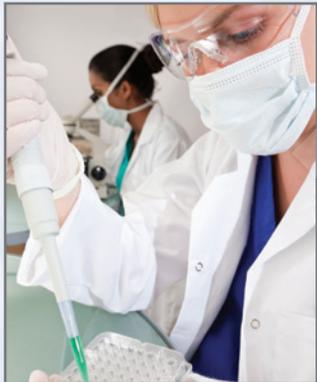
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Analysis & Characterization Assays

For Biotherapeutics

Providing analytical support for your biopharmaceutical from early evaluation of APIs through stability & release of your commercial drug product.



Applications:

Thrombogenicity

Anti-drug antibody testing

Potency of coagulation proteins

Purity of proteins

Structural characterization

Pharmacokinetic studies

Protein purification methods

Forced degradation studies

Aggregate investigation

Custom assay development

Assay validation

Methods:

HPLC (SEC, RPC, IEC, Protein A)

SDS-PAGE (1D & 2D)

Western blot

Clotting assays

ELISA

Chromogenic assays

Thrombin generation assays

Mass spec

pH

Head space vacuum

Residual moisture

Post-translational modification

Refractive index

Total protein

Osmolality

Formulation assessment

Stability & Release Testing

For Biotherapeutics and IVD/POC reagents

Accelerated and real-time stability studies to determine the shelf-life of your drug product under various temperature and humidity conditions. Lot release testing services when you are ready to go from development to commercialization.



Stability Storage Conditions

-70°C ± 10°C

-20°C ± 5°C

5°C ± 3°C

25°C ± 2°C / 60% ± 5% RH

30°C ± 2°C / 65% ± 5% RH

40°C ± 2°C / 75% ± 5% RH

Methods & Compliance

Compedial

Client transferred

Custom developed/validated

cGMP, cGLP and cGCP

ICH, USP and EP

See methods on [Analysis & Characterization Assays page](#)

Specializing in

IVIG drug products

Recombinant clotting factors

Plasma-derived proteins

One Company

Two Solutions

Host Cell Protein Evaluation & Mitigation

With methods to identify and quantify HCPs along with the experience to help remove them from your manufacturing process, we offer an all-under-one-roof solution to your host cell protein challenges.



Methods for HCP detection and quantitation:

1D/2D SDS-PAGE

IEX-HPLC and RP-HPLC for impurity identification

Commercial HCP ELISA evaluation and method execution

LC-MRM targeted quantitative proteomics analysis

Specialized immunochemical methods for immunogenic HCP identification in cases where patients have developed anti-HCP antibodies

SEC-HPLC for HMW impurity detection

1D/2D Western blot – for HCPs & product quantitation

LC-MS/MS proteomic analysis for HCP identity

Develop, validate, and run ELISAs for specific HCPs in product or process samples



haemtechbiopharma.com

• 802.878.1778

About Haematologic Technologies, Inc.

Haematologic Technologies, Inc. (HTI), an ISO 9001:2015 registered company, is a primary manufacturer that specializes in the isolation and characterization of high quality plasma proteins, which are intended for in vitro research use. HTI is focused on proteins involved in the regulation of blood coagulation as well as the regulation of bone metabolism. The HTI product line consists of over 150 highly purified and well-characterized proteins including zymogens, enzymes, cofactors, and inhibitors as well as a complementary line of monoclonal and polyclonal antibodies. Also available are factor deficient plasmas and customized blood collection tubes made-to-order for clinical research. Services available include custom protein purification, protein modification, assay development, contract manufacturing, and contract research.



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About Haemtech Biopharma Services

Haemtech Biopharma Services (HBS) is a leading cGMP-compliant, QC testing laboratory that specializes in providing analytical services for biopharmaceutical manufacturers producing recombinant and plasma-derived protein therapeutics with emphasis on those affecting the hemostatic system. HBS enables its customers to satisfy regulatory and quality testing requirements to bring their drug candidate from development to commercialization.