





# WHO International Biological Reference Preparations

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## BLOOD PRODUCTS AND RELATED SUBSTANCES: Blood Coagulation Factors

PREPARATION	STANDARD	MATERIAL	HELD AT	CODE	WHO/BS DOCUMENT	
Blood coagulation factor IX concentrate, human, Lyophilized, 7.9 IU / vial.	4th International Standard, 2008	Purified plasma protein	NIBSC	07/182	08.2097	
Blood coagulation factor IXa, concentrate, human, Lyophilized, 11.0 IU / ampoule.	1st International Standard, 1999	Recombinant protein	NIBSC	97/562	99.1916	
Blood coagulation factor V Leiden (G1691A), human gDNA (three samples: FV wild type; FVL homozygote; FVL heterozygote), Lyophilized, No assigned value	1st International Reference Panel, 2004	Genetic material	NIBSC	04/224	04.1997	
Blood coagulation factor V, plasma, human, Lyophilized, 0.74 IU of Factor V:C per ampoule	1st International Standard, 2005	Human plasma	NIBSC	03/116	05.2007	
Blood coagulation factor VII concentrate, human, Lyophilized, 6.3 IU / ampoule.	1st International Standard, 1998	Purified plasma protein	NIBSC	97/592	98.1876	
Blood coagulation factor VIIa concentrate, human, Lyophilized, 656 IU / ampoule.	2nd International Standard, 2008	Recombinant protein	NIBSC	07/228	08.2090	
Blood coagulation factor VIII and von Willebrand factor, plasma, human, Lyophilized. Factor VIII: C 0.68 IU/ amp; Factor VIII antigen 1.04 IU/ amp; VWF: antigen 1.00 IU/ amp; VWF: ristocetin cofactor 0.87 IU/amp; VWF: collagen binding 1.03 IU/amp, ,	6th International Standard, 2009	Human plasma	NIBSC	07/316	09.2116	
Blood coagulation factor VIII concentrate, human, Lyophilized, 9.4 IU/ampoule, ,	8th International Standard, 2009	Purified plasma protein	NIBSC	07/350	09.2117	
Blood coagulation factor XI, plasma human, Lyophilized, 0.86 International Units per ampoule.	1st International Standard, 2005	Human plasma	NIBSC	04/102	05.2017	
Blood coagulation factor XIII, plasma, human, Lyophilized, Activity 0.91 IU / ampoule; Antigen 0.93 IU / ampoule.	1st International Standard, 2004	Human plasma	NIBSC	02/206	04.1994 Rev.1	
Blood coagulation factors II, VII, IX, X, plasma, human, Lyophilized, 0.89 IU (factor II), 0.99 IU (factor VII), 0.86 IU (factor IX), 0.89 IU (factor X) / ampoule.	4th International Standard, 2010	Human plasma	NIBSC	09/172	10.2145	
Blood coagulation factors, II and X concentrate, human, Lyophilized, 11.2 IU (factor II), 10.2 IU (factor X) / ampoule.	3rd International Standard, 1999	Purified plasma proteins	NIBSC	98/590	99.1904	
Fibrinogen concentrate, human, Lyophilized, Total protein 15 mg / ampoule. Clottable protein 10.4 mg / ampoule.	1st International Standard, 2000	Purified plasma protein	NIBSC	98/614	00.1927	
Fibrinogen, plasma, human, Lyophilized, 2.2 mg / ampoule.	2nd International Standard, 1999	Human plasma	NIBSC	98/612	99.1903	
Haemophilia A, intron 22 inversion, human gDNA; four samples: normal male, normal female, female carrier, affected male, Lyophilized, No assigned activity.	1st International Reference Preparation, 2008	Genetic material	NIBSC	08/160	08.2093	
MAPREC analysis of Poliovirus type 1 DNA, Liophilized 2.06% 480A,525C/vial, ,	1st International Standard, 2009	Chemically synthesized DNA	NIBSC	00/418	09.2103	

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PREPARATION	STANDARD	MATERIAL	HELD AT	CODE	WHO/BS DOCUMENT	
Prothrombin Mutation G20210A; three samples: wild type, homozygote, heterozygote, Lyophilized, No assigned activity.	1st International Genetic Reference Panel, 2005	Genetic material	NIBSC	05/130	05.2022	
Thrombin, human, Lyophilized, 110 IU / ampoule.	2nd International Standard, 2003	Purified plasma protein	NIBSC	01/580	03.1955	
Thromboplastin, human, recombinant plain, Lyophilized. International Sensitivity Index:1.082, ,	4th International Standard, 2009	Recombinant protein and mixed phospholipids	NIBSC	08/144	09.2125	
Thromboplastin, rabbit, plain, Lyophilized, International Sensitivity Index (ISI) value of 1.15.	3rd International Standard, 2005	Brain-derived	NIBSC	RBT/05	05.2029	
von Willebrand factor, concentrate, Lyophilized, VWF:RCo 9.2 IU per ampoule; VWF:Ag 10.7 IU per ampoule; VWF:CB 10.3 IU per ampoule.	2nd International Standard, 2010	Purified plasma protein	NIBSC	09/182	10.2147	