



# Sheep anti Canine Factor VIII polyclonal antibody (CABT-L430)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

Specificity	This antibody is specific for cFVIII as demonstrated by immunoelectrophoresis and ELISA.
Target	Factor VIII:C
Immunogen	Recombinant canine FVIII (cFVIII).
Isotype	IgG
Source/Host	Sheep
Species Reactivity	Canine
Conjugate	Unconjugated
Applications	IEP, ELISA
Format	Liquid
Concentration	5 mg/ml
Size	5 mg
Buffer	10 mM HEPES, pH 7.4, 150 mM NaCl, 50% (v/v) glycerol.
Preservative	None
Storage	Store between -10 and -20°C. Product will become viscous but will not freeze. Avoid storage in frost-free freezers. Keep vial tightly capped. Allow product to warm to room temperature and gently mix before use.

### **BACKGROUND**

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#### Introduction

Factor VIII is a large glycoprotein (320 kDa) synthesized in the liver. The majority of Factor VIII is cleaved during expression, resulting in a mixture of partially cleaved forms ranging in size from 200-280 kDa. The F.VIII is stabilized in circulation through non-covalent association with von Willebrand Factor. The concentration of F.VIII in normal human plasma is typically 200 ng/mL. In canine plasma, the F.VIII activity is 5-7 fold higher relative to human plasma. F.VIII is a pro-cofactor that is activated through limited proteolysis by thrombin. In this process F.VIIIa dissociates from vWF to combine with activated Factor IX, calcium and a phospholipid surface where it is an essential cofactor in the assembly of the Factor X activator complex. Hemophilia A is a congenital bleeding disorder resulting from an X-chromosome-linked deficiency of F.VIII, occurring with a frequency of 1 in 4000 males. The defect can be caused by any one of hundreds of reported mutations but are most commonly due to inversions within intron 22 of the F.VIII gene. Hemophilia A has also been reported in a variety of species including dog and mouse, with a clinical phenotype very similar to human. The genetic defect in one case of canine Hemophilia-A has been shown to also be due to a gene inversion similar to the human defect, possibly indicating a common instability of the F.VIII gene in humans and dogs.

Keywords

F8;coagulation factor VIII;procoagulant component;AHF;F8B;F8C;HEMA;FVIII;DXS1253E;coagulation factor VIII;factor VIII F8B;antihemophilic factor;coagulation factor VIIIc;

#### **GENE INFORMATION**

Entrez Gene ID 403875

UniProt ID <u>O18806</u>