



# Sheep anti Canine Factor VIII polyclonal antibody [HRP] (CABT-L431)

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

## PRODUCT INFORMATION

<b>Specificity</b>	Prior to conjugation, this antibody was specific for canine FVIII as demonstrated by immunoelectrophoresis and ELISA.
<b>Target</b>	Factor VIII:C
<b>Immunogen</b>	Recombinant canine FVIII (cFVIII).
<b>Isotype</b>	IgG
<b>Source/Host</b>	Sheep
<b>Species Reactivity</b>	Canine
<b>Conjugate</b>	HRP
<b>Applications</b>	IEP, ELISA
<b>Format</b>	Liquid
<b>Size</b>	200 µg
<b>Buffer</b>	A buffered stabilizer solution containing 50% (v/v) glycerol.
<b>Preservative</b>	None
<b>Storage</b>	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. Avoid exposure to sodium azide as this is an inhibitor of peroxidase activity.

# BACKGROUND

## 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

[O18806](#)