

## **Factor VIII Monoclonal Antibodies**

#### **ORDERING INFORMATION**

Catalog No.	Clone No.	MAb Subtype	Size	Library Pack No.	100ug/clone
10101	F8 2.2.9	IgG1	100ug, 500ug	101101	All 4 clones
10102	F8 2.2.32	IgG1	100ug, 500ug		
10103	F8 5.5.72	IgG1	100ug, 500ug		
10104	F8C 27.4	IgG2a	100ug, 500ug		

Format: Protein G-purified antibody in PBS, pH 7.4.

#### **BACKGROUND**

Factor VIII (FVIII) is an essential blood-clotting protein, also known as anti-hemophilic factor (AHF). In humans, factor VIII is encoded by the *F8* gene. Defects in this gene result in hemophilia A, a recessive X-linked coagulation disorder. Factor VIII is produced in liver sinusoidal cells and endothelial cells outside of the liver throughout the body. This protein circulates in the bloodstream in an inactive form, bound to another molecule called von Willebrand factor, until an injury that damages blood vessels occurs. In response to injury, factor VIII is activated and separates from von Willebrand factor. The active protein (sometimes written as factor VIIIa) interacts with another coagulation factor called factor IX. This interaction sets off a chain of additional chemical reactions that form a blood clot.

### **SPECIFICATION SUMMARY**

Antigen: Purified human Factor VIII.

Gene ID: 2157

**Accession nos.**: NP\_000123, P00451

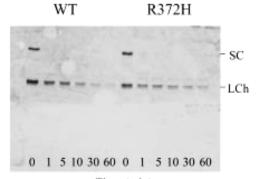
Host Species: Mouse

**Specificity:** 10101, 10102, and 10103 recognize full-length human Factor VIII (epitopes not determined). 10104 recognizes an epitope at the N-terminal region of the 83kDa light chain of

Factor VIII. These antibodies do not cross-react with von Willebrand factor.

#### **APPLICATIONS**

These antibodies have been qualified for use in ELISA and immunoblotting to detect human Factor VIII.



Time (min)

**#10104** Detection of Factor VIII light chain (LCh) in wild-type (WT) and recombinant (R372H) Factor VIII after reaction with thrombin over time (Nogami et al. 2005 *Blood* 105: 4362-4368).



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#### **DILUTION INSTRUCTIONS**

Dilute in PBS or medium that is identical to that used in the assay system.

#### STORAGE AND STABILITY

These antibodies are stable for at least one (1) year at -20°C to -70°C. Store product in appropriate aliquots to avoid multiple freeze-thaw cycles.

#### **REFERENCES FOR #10104**

Takeyama M et al. (2012) Biochemistry 51: 820-828.

Nogami K et al. (2005) Blood 105: 4362-4368.

Fay PJ et al. (2001) J Biol Chem 276: 12434-12439.

Fay PJ (1988) Arch Biochem Biophys 262: 525-531.

Fay PJ et al. (1986) Biochim Biophys Acta 87: 268-278.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.