Human Coagulation Factor II/Thrombin Alexa Fluor® 647-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1148R
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Coagulation Factor II/Thrombin in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human (rh) PROC is observed, and less than 1% cross-reactivity with rhFactor X, recombinant mouse (rm) F
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Coagulation Factor II/Thrombin
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Coagulation Factor II, commonly known as thrombin, is an essential component of the coagulation cascade in which it converts fibrinogen to fibrin, activates factors V, VII, VIII, XIII and forms complexes with protein C and thrombomodulin (1). It also activates platelets and regulates the behavior of additional cells through protease-activated receptors (PARs) (2). It may have either protective or deleterious functions, depending on the level and location (3). Its activity is regulated by endogenous inhibitors such as anti-thrombin III (serpin C1) or heparin cofactor II (serpin D1). A plasma serine protease, thrombin is synthesized in the liver as a 622 amino acid precursor with a 24 amino acid signal peptide. Cleavage by itself or by similar enzymes converts the proenzyme to three forms designated as α-, β- and γ-thrombin. Composed of a disulfide bond-linked dimer of the light chain (A) (residues 328-363) and the heavy chain (B) (residues 364-622), α-thrombin displays the diverse functions as described above. In comparison, the further processed B chains of β- and γ-thrombin have no known physiological function, but retain most of the activity towards small synthetic substrates (4).

PRODUCT SPECIFIC NOTICES

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