

## Mouse Plasma Kallikrein/KLKB1 Alexa Fluor® 647-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF2498R 100 µg

DESCRIPTION		
Species Reactivity	Mouse	
Specificity	Detects mouse Plasma Kallikrein/KLKB1 in direct ELISAs and Western blots. In direct ELISAs, less than 10% cross-reactivity with recombinant human KLKB1 is observed.	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Kallikrein/KLKB1 Gly20-Ala638 Accession # NP_032481	
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.		
Western Blot	Optimal dilution of this antibody should be experimentally determined.	
Immunoprecipitation	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**

Plasma Kallikrein, a serine protease, is synthesized in the liver and circulates in the plasma by binding to high molecular weight (HMW) kininogen or as a free zymogen. Once activated by its physiological activator, factor XII, it displays endopeptidase activity towards peptide bonds after arginine (preferred) and lysine. It cleaves HMW kininogen, its major physiological substrate, to release the potent vasodilator peptide bradykinin. It is also able to cleave a number of inactive precursor proteins to generate active products, such as plasminogen and prourokinase. Thus, it plays an important role in blood pressure regulation, fibrinolysis, and neutrophil activation (1). Mouse Plasma Kallikrein precursor contains a signal peptide (residues 1 to 19) and a pro form sequence (residues 20 to 638). Upon activation, the pro form is converted to a heavy chain and a light chain, which is linked by disulfide bonds and the latter contains the catalytic domain (2). The mouse Plasma Kallikrein proform was expressed in the NS0 cells with a foreign signal peptide. After being treated by thermolysin, the purified enzyme is active against a fluorogenic peptide substrate.

## PRODUCT SPECIFIC NOTICES

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