Mouse Coagulation Factor XIV/Protein C Antibody

Antigen Affinity-purified Polyclonal Sheep IgG

Catalog Number: AF4885

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Coagulation Factor XIV/Protein C in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 10% cross-reactivity with recombinant human Protein C is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Coagulation Factor XIV/Protein C Ile19-Leu460 Accession # P33587
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse Coagulation Factor XIV/Protein C (Catalog # 4885-SE)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Mouse Coagulation Factor XIV/Protein C (Catalog # 4885-SE), see our available Western blot detection antibodies

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Protein C is a vitamin K-dependent serine protease synthesized in the liver as a single-chain precursor, which is then proteolytically processed to two disulfide-linked chains (1). The light chain consists of a Gla (gamma-carboxy-glutamate) domain and two EGF-like domains. The heavy chain consists of an activation peptide (aa 199-212) and serine protease domain (aa 213-449). Physiologically, Protein C is converted to the active form by thrombin, which releases the activation peptide. Protein C plays a key role in anticoagulation, cleaving factors VIIIa and Va to inactivate them. This anticoagulation activity can be enhanced by a presence of a cofactor such as protein S. In hereditary thrombophilia, Protein C deficiency is caused by a genetic mutation that affects Protein C activity. A severe recessive form may result in massive thrombosis fatal to patient.

References:

1. Shen, L. and Dahlbäck, B. (2004) in *Handbook of Proteolytic Enzymes*, Barrett, A.J. *et al*. eds. pp. 1673.

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