

DESCRIPTION

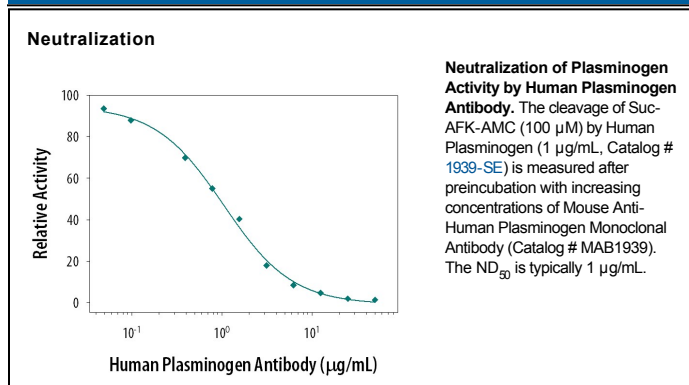
Species Reactivity	Human
Specificity	Detects human PLG, human Plasmin, and the catalytic domain in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 270409
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human plasma-derived Plasminogen Glu20-Asn810
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 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
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Human Plasminogen (Catalog # 1939-SE), see our available Western blot detection antibodies
Neutralization		Measured by its ability to neutralize Human Plasminogen (1 µg/mL, Catalog # 1939-SE) cleavage of the fluorogenic peptide substrate Suc-AFK-Amc (100 µM). The Neutralization Dose (ND ₅₀) is typically 1 µg/mL.

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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. <ul style="list-style-type: none"> • 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

Plasminogen (PLG) is the precursor of plasmin, an active serine protease that dissolves the fibrin of blood clots and acts in many other processes such as embryonic development, tissue remodeling, inflammation, and tumor invasion (1, 2). Synthesized in the kidney, PLG is found in plasma and many extracellular fluids. Activated by u- or t-plasminogen activator, the single-chain PLG (amino acid residues 20-810) is converted to plasmin, which consists of disulfide bond-linked heavy chain A (residues 20-580) and light chain B (residues 581-810). Heavy chain A contains 5 kringle domains and light chain B corresponds to the serine protease domain. A fragment consisting of the first 4 kringle domains has been named as angiostatin, a novel angiogenesis inhibitor (3, 4).

References:

1. Petersen, T.E. *et al.* (1990) *J. Biol. Chem.* **265**:6104.
2. Forsgren, M. *et al.* (1987) *FEBS Lett.* **213**:254.
3. O'Reilly, M.S. *et al.* (1994) *Cell* **79**:315.
4. Sim, B.K. *et al.* (1997) *Cancer Res.* **57**:1329.