

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Angiostatin in direct ELISAs and Western blots. This antibody will also recognize human plasminogen.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Angiostatin Kringle 1-3 Val98-Ser358 with Cys188Ser & Cys316Ser substitutions Accession # P00747
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 Human Angiostatin Kringle 1-3

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

Angiostatin is a 38-45 kDa proteolytic fragment of plasminogen, a 92-100 kDa glycosylated blood zymogen that serves as the precursor for plasmin. Mature human plasminogen is 713 amino acids (aa) in length (aa 98-810). It contains five N-terminal kringle domains (aa 103-561) plus one peptidase S1 domain (aa 581-808). Upon cleavage by tPA between Arg580 and Val581, plasminogen is converted into the disulfide-linked two-subunit enzyme plasmin that dissolves fibrin clots. Plasminogen is also cleaved by MMPs which generate multiple fragments. Angiostatin has documented antiangiogenic and antitumor activity, likely mediated by a downregulation of Bcl2, and an upregulation of thrombospondin-1. Over aa 98-358, human angiostatin shares 81% aa identity with mouse angiostatin.