

# Kininogen HC (A-21): sc-25887

## BACKGROUND

Kininogen is a 644 amino acid precursor protein that is expressed by the KNG1 gene and is secreted into blood plasma. Due to alternative splicing events, several Kininogen protein derivatives exist, including Kininogen LC (light chain) and Kininogen HC (heavy chain), both of which are produced from the Kininogen precursor and exhibit different functions throughout the cell. Kininogen HC plays an important role in blood coagulation by helping to ensure that prekallikrein and Factor XI (both of which are involved in blood coagulation) are properly situated for interaction with Factor XII. Additionally, Kininogen HC releases a smaller, active protein known as bradykinin, which plays a role in smooth muscle contraction, induction of hypotension, regulation of blood glucose levels, stimulation of nociceptors and overall mediation of inflammatory responses throughout the cell. In contrast to Kininogen HC, which is involved in blood clotting, Kininogen LC is primarily associated with inhibition of thrombocyte aggregation and also functions as a strong inhibitor of cysteine proteinases.

## CHROMOSOMAL LOCATION

Genetic locus:Kng1 (mouse) mapping to 16 B1.

## SOURCE

Kininogen HC (A-21) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Kininogen HC of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-25887 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

Kininogen HC (A-21) is recommended for detection of full length Kininogen precursor and Kininogen heavy chain of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Kininogen siRNA (m): sc-39326, Kininogen shRNA Plasmid (m): sc-39326-SH and Kininogen shRNA (m) Lentiviral Particles: sc-39326-V.

Molecular Weight of Kininogen HC: 61 kDa.

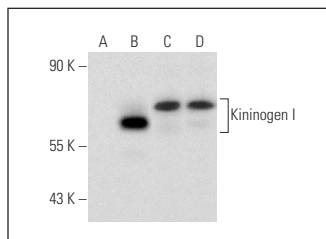
Molecular Weight of Kininogen LC: 53 kDa.

Positive Controls: Kininogen I (m): 293T Lysate: sc-121218, mouse liver extract: sc-2256 or mouse kidney extract: sc-2255.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Kininogen HC (A-21): sc-25887. Western blot analysis of Kininogen I expression in non-transfected: sc-117752 (A) and mouse Kininogen I transfected: sc-121218 (B) 293T whole cell lysates and mouse kidney (C) and mouse liver (D) tissue extracts.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Kininogen HC (2B5): sc-23914**, our highly recommended monoclonal alternative to Kininogen HC (A-21).