SANTA CRUZ BIOTECHNOLOGY, INC.

# kallistatin (h): 293T Lysate: sc-170067



The Power to Question

# **BACKGROUND**

Kallistatin, also known as serpin A4, kallikrein inhibitor and protease inhibitor 4 (Pl 4), is a member of the serpin family and was first identified as a kallikrein-binding protein. It is expressed in vascular smooth muscle cells and endothelial cells. Kallistatin functions as a serine proteinase inhibitor and a heparin-binding protein and is involved in blood pressure regulation, vasculature relaxation, protection against inflammation and stimulation of neointima hyperplasia. It also acts as a negative regulator of angiogenesis by blocking the cellular response to VEGF and bFGF heparin binding proteins (two major angiogenic stimulators). Kallistatin may compete with VEGF and bFGF binding to heparin-sulfate proteoglycans via its heparin binding domain. In addition, its anti-angiogenesis and anti-inflammatory activity may play an important role in the inhibition of tumor growth and arthritis.

# **REFERENCES**

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### **CHROMOSOMAL LOCATION**

Genetic locus: SERPINA4 (human) mapping to 14q32.13.

# **PRODUCT**

kallistatin (h): 293T Lysate represents a lysate of human kallistatin transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

# **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

# **APPLICATIONS**

kallistatin (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive kallistatin antibodies. Recommended use: 10-20  $\mu$ l per lane

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

### **RESEARCH USE**

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

### **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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