

32-20549: Recombinant Human Thrombomodulin(Discontinued)

Alternative Name : CD141, BDCA-3, THBD, TM

Description

Source:HEK293 cells

Thrombomodulin (TM, CD141, THBD) is an endothelial cell-expressed, transmembrane glycoprotein that can form a complex with the coagulation factor, thrombin. The thrombomodulin/thrombin complex converts protein C to its activated form, protein Ca, which in turn proteolytically cleaves and deactivates factor Va and factor VIIIa, two essential components of the coagulation mechanism. This inactivation reduces the generation of additional thrombin, and thereby effectively prevents continued coagulation. Reduced levels of thrombomodulin can correlate with the pathogenesis of certain cardiovascular diseases, such as atherosclerosis and thrombosis. However, the serum levels of the truncated circulating form of thrombomodulin are typically elevated during inflammation and in the presence of various inflammatory-related diseases. The thrombomodulin protein contains 575 amino acids, including an 18 a.a. signal sequence, a 497 a.a. extracellular domain, a 24 a.a. transmembrane sequence, and a 36 a.a. cytoplasmic region. Recombinant Human Thrombomodulin is a 51.4 kDa, 491-amino-acid length glycoprotein containing the extracellular domain of thrombomodulin.

Product Info

Amount : 2 µg / 10 µg

Purification : Purity:>= 98% by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : APAEPQPGGS QCVEHDCFAL YPGPATFLNA SQICDGLRGH LMTVRSSVAA DVISLLLLNGD GGVGRRRLWI
GLQLPPGCGD PKRLGPLRGF QWVTGDNNTS YSRWARLDLN GAPLCGPLCV AVSAAEATVP
SEPIWEEQC EVKADGFLCE FHPATCRPL AVEPGAAAAA VSITYGTPFA ARGADFQALP VGSSAAVAPL
GLQLMCTAPP GAVQGHWARE APGAWDCSVE NGGCEHACNA IPGAPRCQCP AGAALQADGR
SCTASATQSC NDLCEHFCVP NPDQPGSYSC MCETGYRLAA DQHRCEDVDD CILEPSPCPQ
RCVNTQGGFE CHCYPNYDLV DGECVEPVDV CFRANCEYQC QPLNQTSYLC VCAEGFAPIP
HEPHRCQMFC NQTACPADC PNTQASCECP EGYILDDGFI CTDIDECENG GFCSGVCHNL PGTFECICGP
DSALARHIGT DCDSGKVDGG DSGSGEPPPS PTPGSTLTPP A

Application Note

Measured by its ability to activate protein C induced cleavage of the chromogenic substrate, BOC-Asp-Pro Arg-AMC in the presence of thrombin. The specific activity is greater than 500 pmoles/min/ug.