

TECHNICAL DATA SHEET

Recombinant Human VCAM-1 (Carrier-free)

Catalog Number: 21-7091

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human VCAM-1 (Carrier-free)

DESCRIPTION

Vascular cell adhesion molecular (VCAM-1, CD106) is a member of the immunoglobulin superfamily that is expressed on both large and small blood vessels after endothelial cell activation, and on certain leukocytes such as macrophages. It binds to integrins VLA-4 (very late antigen-4) and alpha 4 beta 7 (CD49d/CD29). The primary function of VCAM-1 is the mediation of leukocyte-endothelial cell adhesion and signal transduction.

MOLECULAR MASS

Recombinant human VCAM-1 is a 74.0kDa glycoprotein comprising the extracellular domain (674 amino acid residues) of VCAM-1. Monomeric glycosylated VCAM-1 migrates at an apparent molecular weight of approximately 90.0kDa by SDS-PAGE analysis under reducing conditions.

AMINO ACID SEQUENCE

FKIETTPESR YLAQIGDSVS LTCSTTGCEP PFFSWRTQID SPLNGKVTNE GTTSTLTMNP VSFGNEHSYL CTATCESRKL EKGIQVEIYSF PKDPEIHLG PLEAGKPITV KCSVADVYPF DRLEIDLLKG DHLMKSQEFL EDADRKSLET KSLEVTFTPV IEDIGKVLVC RAKLHIDEMD SVPTVRQAVK ELQVYISPKN TVISVNPSTK LQEGGSVTMT CSSEGLPAPE IFWSKKLDNG NLQHLSGNAT LTLIAMRMED SGIYVCEGVN LIGKNRKEVE LIVQEKPFTV EISPGPRIAA QIGDSVMLTC SVMGCESPSF SWRTQIDSPL SGKVRSEGTN STLTSPVSV FENEHSYLCT VTCGHKKLEK GIQVELYSFPR DPEIEMSGGLV NGSSVTVSCK VPSVYPLDRLE IELLKGETILE NIEFLEDTDM KLENKSLEMT FIPTIEDTGKA LVCQAKLHID DMEFEPKQRQ STQTLVYNVA PRDTTVLVSP SSILEEGSSV NMTCLSQGFP APKILWSRQL PNGELQPLSE NATLTLISTK MEDSGVYLCE GINQAGRSRK EVELLIQVTP KDIKLTAFPS ESVKEGDTVI ISCTCGNVPE TWIILKKKAE TGDTVLSID GAYTIRKAQL KDAGVYECES KKNKVGSQLRS LTLDVQGREN NKDYFSP

SOURCE

HEK293 cells

APPLICATIONS

Bioassay

PURITY

97 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/µg of protein (<1 EU/µg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

BIOACTIVITY

Determined by its ability to support the adhesion of human U937 cells. The expected ED₅₀ for this effect is 0.8-1.0 µg/ml.

RESEARCH AREAS

Angiogenesis/Cardiovascular

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Rice GE and Bevilacqua MP. 1989. Science. 246(4935): 1303-1306. Rice GE, Munro JM and Bevilacqua MP. 1990. J Exp Med. 171(4): 1369-1374. Burkly LC, Jakubowski A, Newman BM, Rosa MD, Chi-Rosso G and Lobb RR. 1991. Eur J Immunol. 21(11): 2871-2875. Schlossman SL, Bloumsell L, Gilks W, et al. eds. (1995). Leucocyte Typing V: White Cell Differentiation Antigens. Oxford University Press. New York.

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