



Recombinant Human soluble CD34

20141103BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no:	S01-069S
Size:	5 µg
Lot. No.:	According to product label
Country of origin:	Germany

Scientific Background

Gene:	<i>CD34</i>
Synonyms:	hematopoietic progenitor cell antigen CD34, CD34

CD34 is a highly glycosylated type I membrane protein that is selectively expressed on hematopoietic stem cells and vascular endothelium. It has been widely used as a molecular marker for the identification, isolation, and manipulation of hemopoietic stem cells and progenitors. CD34 can function as a regulator of hemopoietic cell adhesion by mediating the attachment of stem cells to bone marrow stromal cells or other bone marrow components. The full length human CD34 is a 385 amino acid protein, consisting of a 31 amino acid signal sequence, a 74 amino acid cytoplasmic domain, a 21 amino acid transmembrane domain and a 259 amino acid extracellular domain. Recombinant human sCD34 is a 258 amino acid polypeptide containing only the extracellular domain of the full length CD34 protein.

References

1. Simmons DL et al, Immunol 148:267-271, 1992
2. Satterthwaite AB et al, Genomics 12:788-794, 1992)
3. Nakamura Y et al, Exp. Hematol. 21:236-242, 1993
4. Fackler MJ et al, J. Biol. Chem. 265:11056-11061, 1990

Sequence

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SLDNGGTATPELPTQGTFSNVSTNVSYQETTPSTLGSTSLHPVSQHGNEAT  
TNITETTVKFTSTSVITSVYGNNTSSVQSQTSTVISTVFTTPANVSTPETTLK  
PSLSPGNVSDLSTSTSLATSPTKPYTSSPILSDIKAEIKCSGIREVKLTQ  
GICLEQNKTSSCAEFFKDRGEGLARVLCGEEQADADAGAQCVCSTLLLAQSEVR  
PQCLLLVLANRTEISSKLQLMKKHQSDLKLLGILDFTEQDVASHQSYSQKTL  
EHHHHHH
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Database References

Protein RefSeq:	NP_001764.1
Uniprot ID:	P28906
mRNA RefSeq:	NM_001773.2

Product Specifications

Expressed in	E.coli
Purity	> 98% by SDS-PAGE & silver stain
Buffer	0.5X PBS
Stabilizer	None
Formulation	lyophilized
Length (aa):	267
MW:	32-35 kDa (15% SDS-PAGE)
Result by N-terminal sequencing	SLDNN

Stability: The material is stable for greater than six months at -20° C to -70° C. After the first thawing it is recommended to aliquote the material, because repeated freeze-thaw cycles will decrease the activity.

Reconstitution: The lyophilized human sCD34 is soluble in water and most aqueous buffers; it should be reconstituted in water or PBS to a concentration of not lower than 100µg/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: No biological data available at the moment.



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Handling/Application

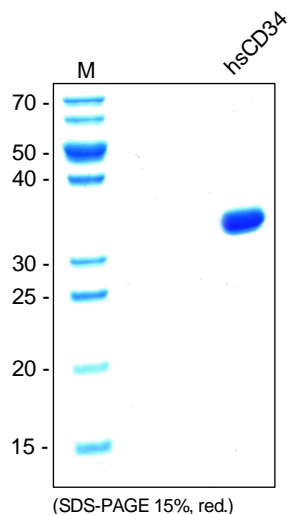


Fig. 1: SDS-PAGE analysis of recombinant human soluble CD34 produced in *E. coli*. Sample was loaded in 15% SDS-polyacrylamide gel under reducing condition and stained with Coomassie blue.