



Recombinant Mouse Soluble Endomucin



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no:	S01-M64
Size:	20 µg
Lot. No.:	According to product label
Country of origin:	Germany

Scientific Background

Gene:	<i>Emcn, Muc14</i>
Synonyms:	Endomucin-1/2, Mucin-14, Muc-14

Endomucin (endothelial sialomucin; also Endomucin-1/2 and Mucin-14) is an 80 - 120 kDa glycoprotein member of the Endomucin family of proteins. It is expressed on endothelial cells and depending upon its glycosylation pattern, can serve as either a pro- or anti-adhesive molecule. Mouse Endomucin precursor is 261 amino acids in length. It is type I transmembrane protein that contains a 170 aa extracellular domain (ECD) (aa 21 - 190) and a 50 aa cytoplasmic region. Three splice variants exist in the ECD. One shows a deletion of aa 91 - 141, a second shows a one aa substitution for aa 91 - 129, and a third shows a one aa substitution for aa 129 - 142. Over aa 21 - 90, mouse Endomucin shares 60% and 30% aa identity with rat and human Endomucin, respectively.

The sequence corresponds to Glu20 to Ser190. A 6x His-tag is fused to the C-terminal end of the recombinant mouse soluble Endomucin.

References

1. Kinoshita M et al, FEBS Lett 499 (1-2): 121, 2001
2. Kuhn A et al, J Invest Dermatol 119:1388, 2002
3. Matsubara A et al, J Exp Medicine 202:1483, 2005
4. Brachtendorf G et al, Dev Dyn 222:410, 2001
5. Morgan SM et al, Blood 93:165, 1999
6. Samulowitz U et al, Am J Path 160:1669, 2002

Sequence

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EDGKDVQNDISIPTPAETSTTKASVTIPGIVSVTNPNKPADGTPPEGTTKSDV
SQTSLVTTINSLTPKHEVGTTTEGPLRNESSTMKITVPNTPTSNANSTLPG
SQNKTENQSSIRTEISVTTQLLDALPKITATSSASLTTAHTMSLLQDTEDR
KIATTPSTTPSYSTRHHHHHH
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Database References

Protein RefSeq:	NP_001156994.1
Uniprot ID:	Q9R0H2
mRNA RefSeq:	NM_001163522.1

Product Specifications

Expressed in	E.coli
Purity	> 95% by SDS-PAGE & silver stain
Buffer	10mM NaP, pH 7.0
Stabilizer	None
Formulation	lyophilized
Length (aa):	178
MW:	~18,78 kDa (Monomer)
Result by N-terminal sequencing	EDGKDVQND

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 mouse sEndomucin 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

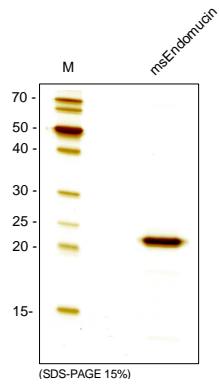


Fig. 1: SDS-PAGE analysis of recombinant mouse soluble Endomucin produced in *E. coli*. Sample was loaded in 15% SDS-polyacrylamide gel under reducing condition and stained with Silver staining.