



# Recombinant Human Soluble Endomucin



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no:</b>	<b>S01-064</b>
<b>Size:</b>	20 µg
<b>Lot. No.:</b>	According to product label
<b>Country of origin:</b>	Germany

## Scientific Background

<b>Gene:</b>	<i>Emcn, Muc14</i>
<b>Synonyms:</b>	Endomucin-2, Gastric cancer antigen Ga34, Mucin-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 a 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 Asn18 to Ser190. A 6x His-tag is fused to the N-terminal end of the recombinant human 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

```
MGSSHHHHHHSSGLVPRGSHMGSHMNSTGVLEAANNSLVVTTTKPSITTPNT  
ESLQKNVVTPTTGTTPKGTITNELLKMSLMSTATFLTSKDEGLKATTTDVRK  
NDSIIISNVTVTSVTLPLNAVSTLQSSKPKTETQSSIKTTEIPGSVLQPDASPS  
KTGTLTSIPVTIPENTSQSQVIGTEGGKNASTSATSRSYSS
```

## Database References

<b>Protein RefSeq:</b>	NP_001153166.1
<b>Uniprot ID:</b>	Q9ULC0
<b>mRNA RefSeq:</b>	NM_001159694.1

## Product Specifications

<b>Expressed in</b>	E.coli
<b>Purity</b>	> 95% by SDS-PAGE & silver stain
<b>Buffer</b>	10 mM NaP, pH 7.0
<b>Stabilizer</b>	None
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	197
<b>MW:</b>	20.4 kDa (Monomer)
<b>Result by N-terminal sequencing</b>	UNDER WORK!

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

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



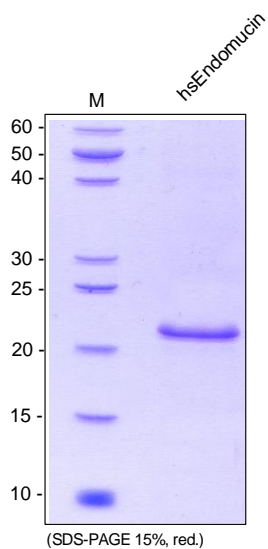
**AVOID REPEATED FREEZE AND THAW CYCLES!**

**Biological Activity:** No biological data available at the moment.



# Recombinant Human Soluble Endomucin

## Handling/Application



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