



# Recombinant Mouse Wnt5a

20190624BB



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

<b>Cat.-no:</b>	<b>M30-023S</b>
<b>Size:</b>	10 µg
<b>Lot. No.:</b>	According to product label
<b>Country of origin:</b>	Germany

## Scientific Background

<b>Gene:</b>	WNT5A
<b>Synonyms:</b>	Protein Wnt-5a

Wnt-5a is one of the most highly investigated non-canonical Wnts and has been implicated in almost all aspects of non-canonical Wnt signalling. In terms of cancer development, Wnt-5a has, until recently, lived in the shadow of its better-characterized relatives. This was largely because of its apparent inability to transform cells or signal through the canonical beta-catenin pathway that is so important in cancer, particularly colorectal cancer. Recent work in a wide range of human tumours has pointed to a critical role for Wnt-5a in malignant progression, but there is conflicting evidence whether Wnt-5a has a tumour-promoting or -suppressing role. Emerging evidence suggests that the functions of Wnt-5a can be drastically altered depending on the availability of key receptors. Hence, the presence or absence of these receptors may go some way to explain the conflicting role of Wnt-5a in different cancers.

## References

1. Prasad CP et al, Cancer Metastasis Rev, 37(4):767-778, 2018
2. Shi YN et al, Clin Chim Acta, 471:263-269, 2017
3. Zhou Y et al, Stem Cells Int, . 5295286, 2017
4. Zeng R et al, Med Sci Monit, 22:5058-5067, 2016.
5. Pashirzad M et al, J Cell Physiol, 232(7):1611-1616, 2017
6. Asem MS et al, Cancers (Basel), 8(9), 2016
7. Endo M et al, Int Rev Cell Mol Biol, 117-48, 2015
8. Murdoch CE et al, Biochem Soc Trans, 42(6):1665-70, 2014
9. Kikuchi A et al, Acta Physiol (Oxf), 204(1):17-33, 2012

## Sequence

```
MIIGAQPLCSQLAGLSQGGKLLCHLYQDHMQYIGEGAKTGIKECQYQFRHRR  
WNCSTVDNTSVFGRVMQIGSRETAFTYAVSAAGVVNAMSACREGELSTCGC  
SRAARPKDLPRDWLWGGCGDNI DYG YRFAKEFVDARERERI HAKGSYESARI  
LMNLHNNEAGRRTVYNLADVACKCHGVSGSCSLKTCWLQLADFRKVG DALKE  
KYDSAAAMRLNSRGKLVQVNSRFNSPTTQDLVYIDPSPDYCVRNESTGSLGT  
QGRLCNKTSEGMDGCELMCCGRGYDQFKTVQTERCHCKFWCCYVKCKKCTE  
IVDQFVCKLEHHHHHHH
```

## Database References

<b>Protein RefSeq:</b>	NP_033550.2
<b>Uniprot ID:</b>	P22725
<b>mRNA RefSeq:</b>	NM_009524.3

## Product Specifications

<b>Expressed in</b>	E.coli
<b>Purity</b>	≥ 85% by SDS-PAGE & Coomassie stain
<b>Buffer</b>	50 mM acetic acid
<b>Stabilizer</b>	None
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	328
<b>MW:</b>	36.9 kDa
<b>Result by N-terminal sequencing</b>	MIIGA

**Stability:** The lyophilized mouse Wnt5a, though stable at room temperature, is best stored desiccated below 0°C. Reconstituted mouse Wnt5a should be stored in working aliquots at -20°C.

**Reconstitution:** Mouse Wnt5a can be reconstituted in 50 mM acetic acid or water to a concentration of 0.1 mg/ml. This solution can be further diluted in water or other buffer solutions or stored at -20°C.



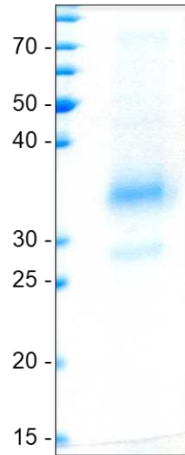
**AVOID REPEATED FREEZE AND THAW CYCLES!**

**Applications:** No direct biological data available!



# Recombinant Mouse Wnt5a

## Handling/Application



**Fig. 1:** SDS-PAGE analysis of recombinant mouse Wnt5a. Sample was loaded in 12.5% SDS-polyacrylamide gel under reducing condition and stained with Coomassie blue.