

**bs-10980R****[ Primary Antibody ]****Mundtacin KS precursor Rabbit pAb**

www.bioss.com.cn

sales@bioss.com.cn

techsupport@bioss.com.cn

400-901-9800

**— DATASHEET —****Host:** Rabbit**Isotype:** IgG**Clonality:** Polyclonal**Target:** Mundtacin KS precursor**Purification:** affinity purified by Protein A**Concentration:** 1mg/ml**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** Mundtacin KS, a bacteriocin produced by *Enterococcus mundtii* NFRI 7393 isolated from grass silage in Thailand, is active against closely related lactic acid bacteria and the food-borne pathogen *Listeria monocytogenes*. In this study, biochemical and genetic characterization of mundtacin KS was done. Mundtacin KS was purified to homogeneity by ammonium sulfate precipitation, sequential ion-exchange chromatography, and solid-phase extraction. The gene cluster (mun locus) for mundtacin KS production was cloned, and DNA sequencing revealed that the mun locus consists of three genes, designated munA, munB, and munC. The munA gene encodes a 58-amino-acid mundtacin KS precursor, munB encodes a protein of 674 amino acids involved in translocation and processing of the bacteriocin, and munC encodes a mundtacin KS immunity protein of 98 amino acids. Amino acid and nucleotide sequencing revealed the complete, unambiguous primary structure of mundtacin KS; mundtacin KS comprises a 43-amino-acid peptide with an amino acid sequence similar to that of mundtacin ATO6 produced by *E. mundtii* ATO6. Mundtacin KS and mundtacin ATO6 are distinguished by the inversion of the last two amino acids at their respective C termini. These two mundtacin KS were expressed in *Escherichia coli* as recombinant peptides and found to be different in activity against certain *Lactobacillus* strains, such as *Lactobacillus plantarum* and *Lactobacillus curvatus*. Mundtacin KS was successfully expressed by transformation with the recombinant plasmid containing the mun locus in heterogeneous hosts such as *E. faecium*, *L. curvatus*, and *Lactococcus lactis*. Based on our results, the mun locus is located on a 50-kb plasmid, pML1, of *E. mundtii* NFRI 7393.

**Applications:** IHC-P (1:100-500)

IHC-F (1:100-500)

IF (1:100-500)

ICC/IF (1:100-500)

ELISA (1:5000-10000)

**Reactivity:** (predicted: Mundtacin KS, Mundtacin L)**Subcellular Location:** Cell membrane