



Rabbit Anti-Mundtacin KS precursor antibody

SL10980R

Product Name:	Mundtacin KS precursor
Chinese Name:	细菌素Mundtacin KS多肽前体抗体
Alias:	mundtacin KS precursor; mundtacin L precursor; bacteriocin.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	mundtacin KS, mundtacin L
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Mundtacin KS precursor:
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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 peptides 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.

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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