10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Mundticin KS precursor Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54331

Specification

Mundticin KS precursor Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC, E**
Host	**Rabbit**
Clonality	**Polyclonal**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from Mundticin KS precursor**
Isotype	**IgG**

Purity
affinity purified by Protein A

Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
Mundticin 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 mundticin KS was done. Mundticin KS was purified to homogeneity by ammonium sulfate precipitation, sequential ion-exchange chromatography, and solid-phase extraction. The gene cluster (mun locus) for mundticin 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 mundticin KS precursor, munB encodes a protein of 674 amino acids involved in translocation and processing of the bacteriocin, and munC encodes a mundticin KS immunity protein of 98 amino acids. Amino acid and nucleotide sequencing revealed the complete, unambiguous primary structure of mundticin KS; mundticin KS comprises a 43-amino-acid peptide with an amino acid sequence similar to that of mundticin ATO6 produced by E. mundtii ATO6. Mundticin KS and mundticin ATO6 are distinguished by the inversion of the last two amino acids at their respective C termini. These two mundticins 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. Mundticin 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.

Mundticin KS precursor Polyclonal Antibody - Additional Information

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. 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 ℃.

Mundticin KS precursor Polyclonal Antibody - Protein Information

Mundticin KS precursor Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mundticin KS precursor Polyclonal Antibody - Images