

Recombinant Escherichia coli Murein tetrapeptide carboxypeptidase(LdcA)

Catalog No: #AP70951

Package Size: #AP70951-1 20ug #AP70951-2 100ug #AP70951-3 1mg

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Description

Product Name	Recombinant Escherichia coli Murein tetrapeptide carboxypeptidase(LdcA)
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1-304aaSequence Info:Full Length
Other Names	LD-carboxypeptidase AMuramoyltetrapeptide carboxypeptidase
Accession No.	P76008
Calculated MW	37.6 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	MSLFHLIAPSGYCIKQHAALRGIQRLTDAGHQVNNVEVIARRCERFAGTETERLEDLNSLARLTTPNTIVLAVRG GYGASRLADIDWQALVARQQHDPLLCGHSDFTAIQCGLLAHGNNVITFSGPMLVANFGADELNAFTEHHFWL ALRNETFTIEWQEGEPTCRAEGLWGGNLAAMLISLIGTPWMPKIENGILVLEDINEHPFRVERMLLQLYHAGILP RQKAILGSFSGSTPNNDYDAGYNLESVYAFLRSRLSIPLITGLDFGHEQRTVTLPLGAHAILNNTREGTQLTISGH PVLKM
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Releases the terminal D-alanine residue from the Cytoplasmic domain tetrapeptide recycling product L-Ala-gamma-D-Glu-meso-Dap-D-Ala. To a lesser extent, can also cleave D-Ala from murein derivatives containing the tetrapeptide, i.e. MurNAc-tetrapeptide, UDP-MurNAc-tetrapeptide, GlcNAc-MurNAc-tetrapeptide, and GlcNAc-anhMurNAc-tetrapeptide. Does not act on murein sacculi or cross-linked muropeptides. The tripeptides produced by the LcdA reaction can then be reused as peptidoglycan building blocks; LcdA is thereby involved in murein recycling. Is also essential for viability during stationary phase.

References

A defect in cell wall recycling triggers autolysis during the stationary growth phase of Escherichia coli.Templin M.F., Ursinus A., Hoeltje J.-V.EMBO J. 18:4108-4117(1999)Research Topic:Others

Note: This product is for in vitro research use only and is not intended for use in humans or animals.