



Recombinant Mycoplasma Arginine Deiminase (ADI)

20200122BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-404S
Size:	5 µg
Lot. No.:	According to product label

Sequence

```

SVFDSKFKGI HVYSEIGELE SVLVHEPGRE IDYITPARLD
ELLFSAILES HDARKEHKQF VAEKANDIN VVELIDLVAE
TYDLASQEAK DKLIEEFLED SEPVLSEEHK VVVRNFLKAK
KTSRELVEIM MAGITKTDLG IEADHELIVD PMPNLYFTRD
PFASVGNVT IHYMRVKVRQ RETLFSRFVF SNHPKLINTP
WYYDPSLKLS IEGGDVFIYN NDTLVVGVSE RTDLQTVTLL
AKNIVANKEC EFKRIVAINV PKWTNLMHLD TWLTMLDKDK
FLYSPIANDV FKFWDYDLVN GGAEPQPVEN GLPLEGLLQS
IINKKPVLP IAGEGASQME IERETHFDGT NYLAIRPGVV
IGYSRNEKTN AALEAAGIKV LPFHGNQLSL GMGNARCMSM
PLSRKDVKW

```

Scientific Background

Synonyms:	ADI
------------------	-----

Arginine Deiminase (ADI) is a microbial enzyme from Mycoplasma produced in E.coli. It has high affinity to L-arginine and hydrolyzes L-arginine to citrulline and ammonia. Low concentrations of ADI have been shown to inhibit proliferation in certain cultured cells by arresting the cell cycle in G (1) and/or S phase. Higher concentrations of ADI lead to subsequent apoptosis. Recombinant Mycoplasma Arginine Deiminase is a 46.3 kDa protein consisting of 409 amino acids.

Database References

Protein RefSeq:	CAA38080.1
Uniprot ID:	P23793
mRNA RefSeq:	AF182646.1

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	Lyophilized from 2mM Sodium Phosphate, pH 7.5 + 0.2mM DTT
Length (aa):	409
MW:	46.3 kDa

Stability: The lyophilized protein is stable at room temperature for 1 month and at 4°C for 3 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 3 months at -20°C to -80°C.

Reconstitution: Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: Measured by its ability to induce apoptosis in Jurkat cells using a concentration of 100-150 ng/ml.