

Lysobacter Enzymogenes Arg-C Hi-5 Insect cells

Product Data Sheet

Type: Recombinant	Cat. No.:	
Source: Hi-5 Insect cells	RBG40003005	(5 µg)
Species:	RBG40003020	(20 µg)
Other names: ,	RBG40003100	(100 µg)

Description

Proteases (also called Proteolytic Enzymes, Peptidases, or Proteinases) are enzymes that hydrolyze the amide bonds within proteins or peptides. Most proteases act in a specific manner, hydrolyzing bonds at, or adjacent to specific residues, or a specific sequence of residues contained within the substrate protein or peptide. Proteases play an important role in most diseases and biological processes, including prenatal and postnatal development, reproduction, signal transduction, the immune response, various autoimmune and degenerative diseases, and cancer. They are also an important research tool, frequently used in the analysis and production of proteins. Arg-C specifically cleaves at the carboxyl side of Arginine residues. Arg-C has a sulfhydryl requirement; it is activated by dithiothreitol, cysteine, or other sulfhydryl-containing reagents. The presence of calcium ions is essential. The enzyme is inhibited by oxidizing agents and sulfhydryl reactants, and by Co²⁺, Cu²⁺, Cd²⁺, and heavy metal ions. Recombinant Lysobacter Enzymogenes Arg-C is a 26.8 kDa protease consisting of 252 amino acid residues including a C-terminal His-Tag.

Research topic

Immune Response, Infection and Inflammation, Oncology

Amino Acid Sequence

GVGDIGSSDY CEKDIVCRVK PSAEFLSASK SVARMVFTPK TGYTGYCSGT LLNNSNSPKR QLFWSAAHCI STQKVANTLQ
 TYWLYDATGC DNDTLSKAV TLTGGATLLH SHATRDLLL ELKSAPPSGA YYAGWNSSAI ATKGTAIEGI HHPSGDLKKY
 SLGSVTALSS TIDGKKPLTK VAWTTGVTEG GSSGSLFTI SSTSGYQLRG GLYGGTSYCS APSDPDYYSQ LDGVWSSIKT
 YFSPHHHHHH HH

Source

Hi-5 Insect cells

Purity

98%

Biological Activity

The reaction is measured as an increase in absorbance at 253 nm resulting from the hydrolysis of N-benzoyl-L-arginine ethyl ester (BAEE).

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

For best results use only freshly reconstituted protease. Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Arg-C is activated by DTT, Cysteine, or other sulfhydryl containing reagents. The presence of calcium ions is essential. Arg-C is inhibited by oxidizing agents and sulfhydryl reactants and by Co²⁺, Cu²⁺, Cd²⁺, and heavy metal ions.

Storage, Stability/Shelf Life

HEADQUARTERS: BioVendor Laboratorní medicína, a.s.	Karasek 1767/1	621 00 Brno CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: info@biovendor.com sales@biovendor.com Web: www.biovendor.com
AUSTRIA: BioVendor GesmbH	Nußdorfer Straße 20/10	1090 Vienna AUSTRIA	Phone: +43-1-89090-25 Fax: +43-1-89090-2515	E-mail: infoAustria@biovendor.com
GERMANY, SWITZERLAND: BioVendor GmbH	Otto-Hahn-Straße 16	34123 Kassel GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail: infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	128 Bingham Rd. Suite 1300	Asheville, NC 28806 USA	Phone: +1-828-575-9250 +1-800-404-7807 Fax: +1-828-575-9251	E-mail: infoUSA@biovendor.com