Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 200-401-B91

TEV Protease Antibody

Overview

Description:	Anti-TEV Protease (RABBIT) Antibody - 200-401-B91
Item No.:	200-401-B91
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	TEV
Host Species:	Rabbit

Product Details

Background:	TEV protease, encoded by the Tobacco Etch Virus (TEV), is a 27 kDa catalytic domain of the Nuclear Inclusion a (NIa) protein encoded by the virus (TEV). It is widely used for cleaving fusion proteins because of its sequence specificity. It recognizes a linear epitope of the general form E-Xaa-Xaa-Y-Xaa-Q-(G/S). Cleavage occurs between Q and G or Q and S. The structure of TEV protease is similar to that of the serine protease family. Like serine proteases, TEV protease utilizes a catalytic triad of residues to hydrolyze peptide bonds. The distinguishing feature of TEV protease, however, is that instead of the serine nucleophile in the triad Ser-Asp-His, there is a cysteine, which may explain the resistance of TEV protease to protease inhibitors which are commonly used. The strain used is the auto inactivation-resistant mutant S219V. The catalytic activity of the S219V mutant is approximately 2 fold greater than that of the wild-type protease.
Synonyms:	rabbit anti-TEV Protease Antibody, Tobacco Etch Virus, tobacco etch potyvirus, TEV, TEV Protease
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	TEV
Immunogen Type:	Recombinant Protein

Immunogen:	This protein-A purified antibody was prepared from whole rabbit serum produced by repeated immunizations with recombinant MBP-and-poly-His-tagged auto inactivation-resistant mutant TEV Protease.
Purity/Specificity:	This product was protein-A purified and cross-adsorbed against MBP from monospecific antiserum by chromatography. Assay by western blot showed no reactivity to MBP.
Relevant Links:	• NCBI - NP_734212.1 • UniProtKB - P04517 • GeneID - 1502321

Application Details

Tested Applications:	ELISA, WB
Application Note:	This protein A purified antibody has been tested for use in western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 27 kDa in size corresponding to TEV by western blotting in the appropriate cell lysate or extract. Anti-TEV protease may be useful to detect residual TEV protease in preparations of recombinant proteins in which that protease may interfere with downstream manipulations.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:1,500-1:27,000
WB:	1:500

Formulation

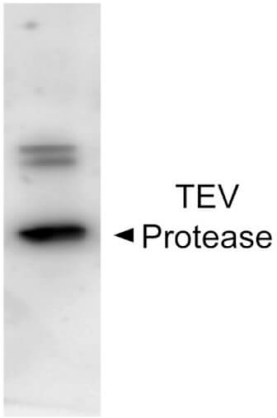
Physical State:	Liquid (sterile filtered)
Concentration:	1.01 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
Ecoli lysate containing recombinant TEV protease was loaded on to a 4-20% gradient gel for separation. After electrophoresis, the gel was blocked with 1% BSA (p/n BSA-30) in TBS for 30min at ambient. The membrane was probed with the primary antibody at a 1:1,000 dilution in 1%BSA/TBS overnight at 4° C. For detection HRP conjugated Gt-a-Rabbit IgG (p/n 611-103-122) was used at a 1:40,000 dilution for 30 min at ambient and data generated with FemtoMax™ enhanced chemiluminescent reagent (p/n FEMTOMAX-100). Images were captured using BioRad Versadoc 4000MP Imaging System. Expect a band approximately 27 kDa.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.