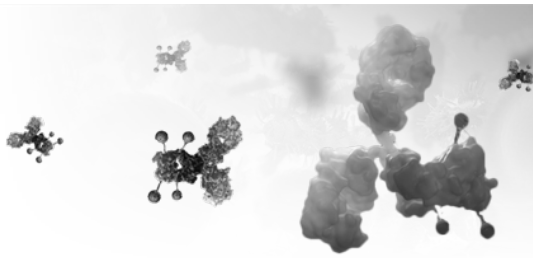

Rabbit Anti-FtsZ polyclonal antibody (CABT-RM117)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Detects Cell Division Protein FTsZ in Bacillus subtilis.
Target	FtsZ
Immunogen	Full length purified FtsZ from Bacillus subtilis.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Bacillus subtilis
Purification	Unpurified
Conjugate	unconjugated
Applications	IF, WB
Molecular Weight	~44 kDa observed; 40.40 kDa calculated. Uncharacterized bands may be observed in some lysate(s).
Format	Liquid
Size	25 µl
Buffer	Rabbit polyclonal antiserum
Preservative	0.05% sodium azide
Storage	Stable for 1 year at -20°C from date of receipt. Handling Recommendations: Upon receipt and prior to removing the cap, centrifuge the vial and gently mix the solution. Aliquot into

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

microcentrifuge tubes and store at -20°C. Avoid repeated freeze/thaw cycles, which may damage IgG and affect product performance.

BACKGROUND

Introduction	Cell division protein FtsZ is encoded by the FtsZ gene in Bacillus subtilis. FtsZ is homodimeric prokaryotic homologue of tubulin with GTPase activity. It is found in nearly all bacteria. It polymerizes in the presence of GTP to form higher-ordered polymers. It contains three GTP-binding sites that are located in the N-terminal region. The less conserved C-terminal domain contains residues that are important for GTP hydrolysis. FtsZ is shown to be essential for bacterial cell division and in association with FtzA (FtsAZ) it forms a contractile ring structure (Z ring) at the site of cell division. The regulation of the ring assembly controls the timing and the location of cell division. One of the major functions of FtsZ is to recruit other cell division proteins to the septum to produce a new cell wall between the dividing cells. The FtsZ treadmilling rate controls the rate of peptidoglycan synthesis and cell division. During bacterial cell division FtsZ co-localizes with SpoIIE, a dual function protein that contributes to the switch form medial to polar cell division during sporulation. The anti-FtsZ blot has also been used as control for sample loading.
Keywords	Cell division protein; FtsZ; Cell Division FtsZ GTPase; BSU15290

GENE INFORMATION

Entrez Gene ID	935971
UniProt ID	P17865

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221