**Product no AS07 217**

**FtsZ | Procaryotic cell division GTPase (cyanobacterial)**

**Product information**

- **Immunogen**: Whole cyanobacterial (Anabaena PCC 7120) FtsZ protein, UniProt: Q3MC27 overexpressed in E.coli.
- **Host**: Rabbit
- **Clonality**: Polyclonal
- **Purity**: Serum
- **Format**: Lyophilized
- **Quantity**: 50 µl
- **Reconstitution**: For reconstitution add 50 µl of sterile water
- **Storage**: Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please remember to spin the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.

**Additional information**

To detect E.coli FtsZ protein we recommend a following product: AS10 715 | anti-FtsZ procaryotic cell division GTPase (bacterial), rabbit antibody

To detect FtsZ protein in higher plants following antibodies are recommended:
- AS09 413 | Anti-FtsZ1 and 2 | Plant cell division protein FtsZ1 and FtsZ2, rabbit antibodies
- AS13 2651 | Anti-FtsZ2 | Plant cell division protein ftsZ2, rabbit antibodies

**Application information**

- **Recommended dilution**: 1 : 200 (IL) Immunogold-TEM, 1 : 500 (IF), 1 : 2000-1 : 5000 (WB)
- **Expected | apparent MW**: 44,5 | 50 kDa
- **Confirmed reactivity**: *Cylindrospermopsis raciborskii* CS-505, *Listeria monocytogenes* (weak reaction), *Synechococcus elongatus*
- **Predicted reactivity**: *Phaeodactylum tricornutum*, *Prochlorococcus* sp.
- **Not reactive in**: higher plants

**Additional information**

This antibody can be used as a loading control antibody in cyanobacteria.

Immunofluorescence has been done by labelling *Synechococcus elongatus* cells at 30 °C for 2 hours with FtsZ antibodies diluted to 1:500 in blocking buffer. Detection images can be found in Kabeya et al (2010).

This product can be sold containing ProClin if requested.

**Selected references**

Application example

Total protein samples (5 or 10 µg) from: Arabidopsis thaliana, leaf (1), Synechocystis 6803 motile (2), Synechocystis 6803 GT (glucose tolerant strain) (3), Synechococcus elongates 7942 (4), Marker - Pierce™ Prestained Protein MW Marker (kat #26612) were extracted with buffer (10mM Tris HCl, pH 8.0, 0.5% LDS, 4% glycerol, 0.1 mM EDTA) were mixed with sample buffer and denatured for 5 min at 95°C. Samples were separated on 10% SDS-PAGE and blotted 1h to nitrocellulose membrane (Amersham Protran) using semi-dry transfer (Bio-Rad) in standard transfer buffer in presence of 10% methanol. Transfer of proteins to the membrane was checked using 0.5% Ponceau S staining before the blocking step. Blots were blocked in buffer (2% low-fat milk in 1xPBS, 0.1% Tween) for 1h at room temperature (RT) with agitation. Blots were incubated in the primary antibody at a dilution of 1:1000 at RT with agitation. The antibody solution was decanted and the blot was rinsed briefly twice, then washed once for 15 min and 3 times for 5 min in PBS-T at RT with agitation. Blot was incubated in secondary antibody (goat anti-rabbit IgG, AS09 602, Agrisera) diluted to 1:30 000 for 1h at RT with agitation. The blot was washed as above and developed for 5 min with chemiluminescence detection reagent and ChemiDoc detection system.

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