



Anti-Sigma 32 of *Serratia marcescens*, Rabbit-Polyclonal Antibody

Catalog No. GB-10392

Quantity: 100µg

Applications: Western blot

Antigen species: *Serratia marcescens*

Reactivity: *Serratia marcescens*

Host species: Rabbit

Form: Protein A affinity purified antibody

Target description

When cells are exposed to stresses such as heat or ethanol, a set of well-conserved heat shock proteins (HSPs) are rapidly induced. Induction of HSPs is controlled primarily at the level of transcription. In *Serratia marcescens*, expression of HSPs is positively regulated by a heat shock transcription factor-sigma 32 encoded by the *rpoH* gene. The rPOH protein plays a major role in regulation of the heat shock response by enhancing transcription of the heat shock genes.

Antigen

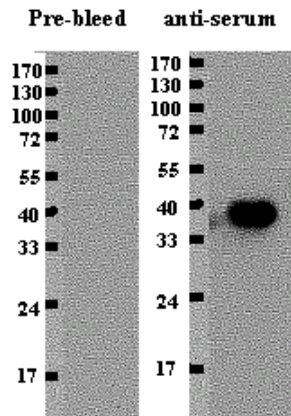
This polyclonal antibody was raised by immunizing rabbit with a Sigma 32 of *Serratia marcescens* protein.

Application

The antibody titer is more than 1/2000 dilution for Western blot analysis (WB) of sigma 38 protein. It has not been tested in the other applications. However, for the first testing, we recommend 1/5,000 dilution for ELISA, 1/1600 dilution for tissue extracts or cell lysates for WB, 1/100 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

Related Products

1. Anti-sigma 38 of *Serratia marcescens* pAb (GB- 10391)



M.W. of Sigma 32 of *Serratia marcescens*: 38 KDa

Western blot Protocol

1. Antigens are loaded 4µg per well in 12% SDS-PAGE.
2. Block with 3%BSA/TBST for 1 hour at RT.
3. Wash blot with 0.05% TBST 3 X 15 minutes.
4. Add 2000X dilution of antibody.
5. Incubate for 1 hour at RT.
6. Wash blot with 0.05% TBST 3 X 15 minutes.
7. Add appropriate amount of correct secondary antibody, goat anti-rabbit antibody conjugated with HRP). Incubate for 1 hour at RT.
8. Wash blot 3 X 15 minutes with 0.05% TBST at RT.
9. Add HRP substrate and develop

Storage

It is supplied as protein A affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1×PBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

References

1. Miyo Terao Morita, Yoshiyuki Tanaka, Takashi S. Kodama, Yoshimasa Kyogoku, Hideki Yanagi, and Takashi Yura. 1999. Translational induction of heat shock transcription factor sigma 32: evidence for a built-in RNA thermosensor. *GENES & DEVELOPMENT* Vol. 13. 655-665.
2. Kenji Nakahigashi, Hideki Yanagi, and Takashi Yura. 1998. Regulatory Conservation and Divergence of σ32 Homologs from Gram-Negative Bacteria: *Serratia marcescens*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, and *Agrobacterium tumefaciens*. *J. Bacteriol*, Vol 180. p2402-2408.

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