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Anti- SeIR domain containing protein / methionine sulfoxide reductase domain containing protein, Rabbit-Polyclonal Antibody

Catalog No. GB-10381 **Quantity:** 250µl **Applications tested:** ELISA
Antigen species: Arabidopsis thaliana **Reactivity:** Arabidopsis thaliana
Host species: Rabbit **Form:** Antiserum

Target description

This enzyme repairs damaged proteins. Methionine sulfoxide in proteins is reduced to methionine. Peptide methionine sulphoxide reductase (Msr) reverses the inactivation of many proteins due to the oxidation of critical methionine residues by reducing methionine sulphoxide, Met(O), to methionine. The domains: MsrA and MsrB, reduce different epimeric forms of methionine sulphoxide.

In a number of pathogenic bacteria including Neisseria gonorrhoeae, the MsrA and MsrB domains are fused; the MsrA being N-terminal to MsrB. This arrangement is reversed in Treponema pallidum. In Neisseria gonorrhoeae and Neisseria meningtidis a thioredoxin domain is fused to the N-terminus. This may function to reduce the active sites of the downstream MsrA and MsrB domains.

Antigen

This polyclonal antibody was raised by immunizing rabbit with the synthetic SeIR domain-containing protein peptide.

Application

The antibody titer is more than 1000K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/100 dilution for ELISA, 1/500 dilution for Western blot analysis (WB) of recombinant protein, 1/400 dilution for tissue extracts or cell lysates, 1/100 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

Related Products

1. Anti-SeIR domain containing protein pAb (GB-10380).

Ab dilution	Pre-bleed	Anti-serum
1:100	0.074	1.890
1:1,000	0.066	1.648
1:10,000	0.053	0.755
1:100,000	0.055	0.175
1:1,000,000	0.054	0.091
Titer		3250 K

ELISA Protocol

Antigen is coated on EIA strips at 1µg per well. Add 200µl of blocking buffer and then wash wells with PBST buffer. Antiserum and purified Ab of GB-10381 is diluted in series as 10^2~10^6 folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 650 nm. Amount of color is directly proportional to the amount of antibodies. Antibody titer is defined as maximal dilution with >0.1 of ABS of antiserum minus prebleed serum.

Storage

It is supplied as lyophilized serum. Redissolve the lyophilized powder with 250 microliter sterile water will restore the original condition. Store at 4°C for short term application. For long-term storage, aliquot and store at -20°C.

References

1. Moskovitz J, Weissbach H, Brot N. Cloning the expression of a mammalian gene involved in the reduction of methionine sulfoxide residues in proteins. Proc Natl Acad Sci U S A 1996;93:2095-2099.

2. Wizemann TM, Moskovitz J, Pearce BJ, Cundell D, Arvidson CG, So M, Weissbach H, Brot N, Masure HR. Peptide methionine sulfoxide reductase contributes to the maintenance of adhesins in three major pathogens. Proc Natl Acad Sci USA 1996;93:7985-7990.