SANTA CRUZ BIOTECHNOLOGY, INC.

S-probe (K-14): sc-802



BACKGROUND

Plasmid vectors for the expression of coding regions of eukaryotic genes in bacterial, insect and mammalian hosts are in common usage; such expression vectors are frequently used to encode fusion proteins consisting of a eukaryotic target protein and a specialized region designed to aid in the purification or quantification of the target protein. A novel system that addresses the issue of protein quantification utilizes an enzymatically cleaved derivative of bovine RNase A, called RNase S. RNase S is composed of the S-peptide (residues 1-20) and the S-protein (residues 21-124), which together form the active enzyme. Although the S-protein itself is inactive, addition of the S-peptide, or a fusion protein tagged with the S-peptide, will reconstitute its enzymatic activity which can then be assayed on a poly(C) substrate and quantified by spectroscopy.

REFERENCES

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- Kroll, D.J., et al. 1993. A multifunctional prokaryotic expression system: overproduction, affinity purification, and selective detection. DNA Cell Biol. 12: 441-453.

SOURCE

S-probe (K-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within the S-Tag encoded-domain of pET-29a-c+ expression vector.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-802 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

S-probe (K-14) is recommended for detection of pET-29a-c⁺ encoded fusion proteins by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Positive Controls: pET-29a-c+ encoded fusion proteins.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

SELECT PRODUCT CITATIONS

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STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

MONOS Satisfation Guaranteed

Try **S-probe (SBSTAGc): sc-69832**, our highly recommended monoclonal alternative to S-probe (K-14).