# SANTA CRUZ BIOTECHNOLOGY, INC.

# HA-probe (HA.C5): sc-57595



The Power to Question

## 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 hybrid fusion proteins consisting of a eukaryotic target protein and a specialized region designed to aid in the purification and visualization of the target protein. For example, the pCDM8 expression vector and derivatives thereof encode fusions between the target protein and an eleven amino acid peptide derived from the influenza protein hemagglutinin (HA). The HA epitope tag is useful in Western blotting and immunohistochemical localization of expressed fusion proteins when examined with antibodies raised specifically against the HA-epitope tag.

## REFERENCES

- 1. Maniattis, T., et al. 1982. Molecular Cloning. Cold Spring Laboratory, Cold Spring Harbor, NY.
- Smith, D.B. and Johnson, K.S. 1988. Single-step purification of polypeptides expressed in *Escherichia coli* as fusions with glutathione S-transferase. Gene 67: 31-40.
- 3. Hochuli, E. 1988. Large-scale chromatography of recombinant proteins. J. Chromatog. 444: 293-302.
- 4. Thanos, D. and Maniatis, T. 1992. The high mobility group protein HMG I(Y) is required for NF $\kappa$ B-dependent virus induction of the human IFN- $\beta$  gene. Cell 71: 777-789.
- Kroll, D.J., et al. 1993. A multifunctional prokaryotic protein expression system: overproduction, affinity purification, and selective detection. DNA Cell Biol. 12: 441-453.
- Els Conrath, K. et al. 2001. Camel single-domain antibodies as modular building units in bispecific and bivalent antibody constructs. J. Biol. Chem. 276: 7346-50.

### SOURCE

HA-probe (HA.C5) is a mouse monoclonal antibody raised against a synthetic peptide derived from the human influenza hemagglutinin .

# PRODUCT

Each vial contains 100  $\mu g~lg G_3$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# **RESEARCH USE**

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

# PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

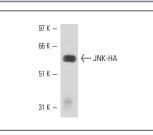
## APPLICATIONS

HA-probe (HA.C5) is recommended for detection of proteins containing the HA tag of nsr origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation  $[1-2 \ \mu g \ per \ 100-500 \ \mu g \ of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).$ 

# **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker<sup>™</sup> compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



HA-probe (HA.C5): sc-57595. Western blot analysis of HA-tagged human recombinant JNK.

## SELECT PRODUCT CITATIONS

- Garcia, M., et al. 2007. Herpesvirus saimiri STP-A oncoprotein utilizes Src family protein tyrosine kinase and tumor necrosis factor receptorassociated factors to elicit cellular signal transduction. J. Virol. 81: 2663-2674.
- 2. Wu, Y.C., et al. 2009. Host cell sumoylation level influences papillomavirus E2 protein stability. Virology 387: 176-183.