

# Omni-probe (D-8): sc-7270

## BACKGROUND

Plasmid vectors for the expression of coding regions of eukaryotic genes in *E. coli*, insect and mammalian hosts are in common usage. Such expression vectors often encode hybrid fusion proteins containing part prokaryotic and part eukaryotic specified proteins. For instance, the prokaryotic pRSET A, B, C and pTrc His A, B, C; baculovirus pBlue Bac His A, B, C and mammalian pEBV His A, B, C expression vectors encode fusion proteins containing poly-histidine sequences fused to insertion cDNA sequences allowing for rapid purification on nickel-charged agarose resin. Omni-probe antibodies directed to specific vector sequences mapping between the polyhistidine tag and cDNA insert sequences provide a convenient and rapid means for identification of expressed fusion proteins in different hosts.

## REFERENCES

- Maniatis, T., et al. 1982. Molecular Cloning. Cold Spring Harbor Laboratory, Cold Spring Harbor, NY.
- Nemenoff, R.A., et al. 1993. Phosphorylation and activation of a high molecular weight form of phospholipase A<sub>2</sub> by p42 microtubule-associated protein 2 kinase and protein kinase C. *J. Biol. Chem.* 268: 1960-1964.

## SOURCE

Omni-probe (D-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 8-30 within the (His)<sub>6</sub> and polylinker sequence.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Omni-probe (D-8) is available conjugated to agarose (sc-7270 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-7270 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-7270 PE), fluorescein (sc-7270 FITC), Alexa Fluor<sup>®</sup> 488 (sc-7270 AF488), Alexa Fluor<sup>®</sup> 546 (sc-7270 AF546), Alexa Fluor<sup>®</sup> 594 (sc-7270 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-7270 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-7270 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-7270 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-7270 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

Omni-probe (D-8) is recommended for detection of fusion proteins encoded by the prokaryotic pRSET A, B, C and pTrc His A, B, C; baculovirus pBlue Bac His A, B, C and mammalian pEBV His A, B, C expression vectors by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

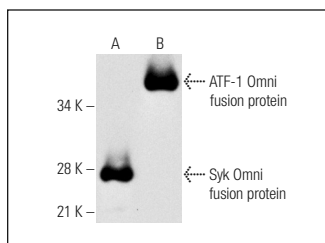
## STORAGE

Store at 4° C, **\*\*DO 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.

## DATA



Omni-probe (D-8): sc-7270. Western blot analysis of Omni-tag fusion proteins, Syk (257-352): sc-4063 WB (A) and ATF-1 (39-271): sc-4006 WB (B).

## SELECT PRODUCT CITATIONS

- Reilly, J.F., et al. 2000. Association of fibroblast growth factor receptor 1 with the adaptor protein Grb14. characterization of a new receptor binding partner. *J. Biol. Chem.* 275: 7771-7778.
- Pekarsky, Y., et al. 2008. Tcl1 functions as a transcriptional regulator and is directly involved in the pathogenesis of CLL. *Proc. Natl. Acad. Sci. USA* 105: 19643-19648.
- Nikolaienko, O., et al. 2009. Intersectin 1 forms a complex with adaptor protein Ruk/CIN85 *in vivo* independently of epidermal growth factor stimulation. *Cell. Signal.* 21: 753-759.
- Cho, S.J., et al. 2010. RNPC1 modulates the RNA-binding activity of, and cooperates with, HuR to regulate p21 mRNA stability. *Nucleic Acids Res.* 38: 2256-2267.
- Novokhatska, O., et al. 2011. Intersectin 2 nucleotide exchange factor regulates Cdc42 activity during *Xenopus* early development. *Biochem. Biophys. Res. Commun.* 408: 663-668.
- Moribe, H., et al. 2012. Tetraspanin is required for generation of reactive oxygen species by the dual oxidase system in *Caenorhabditis elegans*. *PLoS Genet.* 8: e1002957.
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- Kropyvko, S., et al. 2017. Mammalian verprolin CR16 acts as a modulator of ITSN scaffold proteins association with actin. *Biochem. Biophys. Res. Commun.* 484: 813-819.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.