

# OctA-Probe (D-8): sc-807

## 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. A small hydrophilic peptide of eight amino acids has been engineered into the N-terminus of proteins expressed by a variety of prokaryotic and eukaryotic expression vectors. This small peptide has proven useful in visualization and immunoaffinity purification of expressed fusion proteins, and because of the diminutive size of the peptide moiety and its hydrophilic properties, expressed proteins frequently retain a high level of their biological activity. In addition, the eight amino acid moiety can be removed by cleavage with enterokinase.

## REFERENCES

1. Itakura, K., et al. 1977. Expression in *Escherichia coli* of a chemically synthesized gene for the hormone somatostatin. *Science* 198: 1056-1063.
2. Goeddel, D.V., et al. 1979. Expression in *Escherichia coli* of chemically synthesized genes for human Insulin. *Proc. Natl. Acad. Sci. USA* 76: 106-110.
3. Maniatis, T., et al. 1982. *Molecular Cloning*. Cold Spring Harbor, New York: Cold Spring Laboratory.
4. Adachi, H., et al. 2001. Transgenic mice with an expanded CAG repeat controlled by the human AR promoter show polyglutamine nuclear inclusions and neuronal dysfunction without neuronal cell death. *Hum. Mol. Genet.* 10: 1039-1048.

## SOURCE

OctA-Probe (D-8) is available as either rabbit (sc-807) or goat (sc-807-G) polyclonal affinity purified antibody raised against an eight amino acid sequence identical to the FLAG<sup>®</sup> peptide sequence, DYKDDDDK.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-807 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-807 AC, 500 µg/0.25 ml agarose in 1 ml.

Available as HRP conjugate for Western blotting, sc-807 HRP, 200 µg/1 ml.

## APPLICATIONS

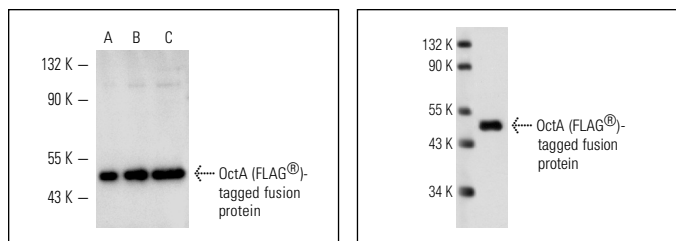
OctA-Probe (D-8) is recommended for detection of OctA-Probe by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

FLAG<sup>®</sup> is a registered trademark of Sigma-Aldrich Corp., which is not affiliated with Santa Cruz Biotechnology, Inc.

## STORAGE

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

## DATA



OctA-Probe (D-8): sc-807. Western blot analysis of OctA (FLAG<sup>®</sup>)-tagged recombinant protein (A-C).

OctA-Probe (D-8)-G: sc-807-G. Western blot analysis of OctA (FLAG<sup>®</sup>)-tagged fusion protein from Sigma.

## SELECTED PRODUCT CITATIONS

1. Regnier, C.H., et al. 1997. Identification and characterization of an IκB kinase. *Cell* 90: 373-383.
2. Pedersen, K.B., et al. 2010. Glucose induces expression of rat pyruvate carboxylase through a carbohydrate response element in the distal gene promoter. *Biochem. J.* 426: 159-170.
3. Langlois, B., et al. 2010. LRP-1 promotes cancer cell invasion by supporting ERK and inhibiting JNK signaling pathways. *PLoS ONE* 5: e11584.
4. Hubé, F., et al. 2011. Steroid receptor RNA activator protein binds to and counteracts SRA RNA-mediated activation of MyoD and muscle differentiation. *Nucleic Acids Res.* 39: 513-525.
5. Peng, S., et al. 2011. Genome-wide studies reveal that lin28 enhances the translation of genes important for growth and survival of human embryonic stem cells. *Stem Cells* 29: 496-504.
6. Jin, J., et al. 2011. Evidence that Lin28 stimulates translation by recruiting RNA helicase A to polysomes. *Nucleic Acids Res.* 39: 3724-3734.
7. Zhi, H.Y., et al. 2011. PTPH1 cooperates with vitamin D receptor to stimulate breast cancer growth through their mutual stabilization. *Oncogene* 30: 1706-1715.
8. Russo, A., et al. 2011. Autoregulatory circuit of human rpl3 expression requires hnRNP H1, NPM and KHSRP. *Nucleic Acids Res.* 39: 7576-7585.

## RESEARCH USE

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



Try **OctA-Probe (H-5): sc-166355** or **OctA-Probe (G-8): sc-166384**, our highly recommended monoclonal alternatives to OctA-Probe (D-8). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **OctA-Probe (H-5): sc-166355**.