

OctA-Probe (G-8): sc-166384

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.

SOURCE

OctA-Probe (G-8) is a mouse monoclonal antibody raised against OctA (FLAG[®])-tagged proteins.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

OctA-Probe (G-8) is available conjugated to agarose (sc-166384 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166384 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166384 PE), fluorescein (sc-166384 FITC), Alexa Fluor[®] 488 (sc-166384 AF488), Alexa Fluor[®] 546 (sc-166384 AF546), Alexa Fluor[®] 594 (sc-166384 AF594) or Alexa Fluor[®] 647 (sc-166384 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-166384 AF680) or Alexa Fluor[®] 790 (sc-166384 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-166384 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

OctA-Probe (G-8) is recommended for detection of OctA (FLAG[®])-tagged fusion proteins of OctA and FLAG tagged proteins origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

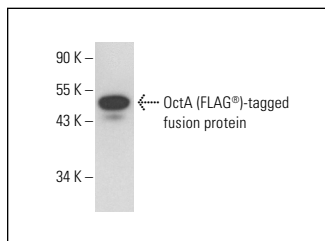
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

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 (G-8): sc-166384. Western blot analysis of OctA (FLAG[®])-tagged fusion protein.

SELECT PRODUCT CITATIONS

1. Presnell, S.R., et al. 2012. Differential transcription factor use by the KIR2DL4 promoter under constitutive and IL-2/15-treated conditions. *J. Immunol.* 188: 4394-4404.
2. Adamek, R.N., et al. 2013. A FRET-based assay for the discovery of West Nile virus NS2B-NS3 protease inhibitors. *Bioorg. Med. Chem. Lett.* 23: 4848-4850.
3. Rodriguez, P.A., et al. 2014. Mp10 and Mp42 from the aphid species *Myzus persicae* trigger plant defenses in *Nicotiana benthamiana* through different activities. *Mol. Plant Microbe Interact.* 27: 30-39.
4. Chang, P., et al. 2017. Molecular identification of transmembrane protein 68 as an endoplasmic reticulum-anchored and brain-specific protein. *PLoS ONE* 12: e0176980.
5. Janjanam, J., et al. 2018. LIM and cysteine-rich domains 1 is required for Thrombin-induced smooth muscle cell proliferation and promotes atherogenesis. *J. Biol. Chem.* 293: 3088-3103.
6. Bai, X., et al. 2019. A *de novo* mutation in the MTUS1 gene decreases the risk of non-compaction of ventricular myocardium via the Rac1/Cdc42 pathway. *Front. Pediatr.* 7: 247.
7. Wachalska, M., et al. 2019. Fluorescent TAP as a platform for virus-induced degradation of the antigenic peptide transporter. *Cells* 8: 1590.
8. Jin, D., et al. 2020. m6A demethylase ALKBH5 inhibits tumor growth and metastasis by reducing YTHDFs-mediated YAP expression and inhibiting miR-107/LATS2-mediated YAP activity in NSCLC. *Mol. Cancer* 19: 40.
9. Liu, D., et al. 2020. Protein diaphanous homolog 1 (Diaph1) promotes myofibroblastic activation of hepatic stellate cells by regulating Rab5a activity and TGFβ receptor endocytosis. *FASEB J.* 34: 7345-7359.

RESEARCH USE

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

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