SANTA CRUZ BIOTECHNOLOGY, INC.

OctA-Probe (H-5): sc-166355

SANTA CRUZ BIOTECHNOLOGY

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. 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 (H-5) is a mouse monoclonal antibody raised against OctA (FLAG®)-tagged proteins.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

OctA-Probe (H-5) is available conjugated to agarose (sc-166355 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-166355 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166355 PE), fluorescein (sc-166355 FITC), Alexa Fluor® 488 (sc-166355 AF488), Alexa Fluor® 546 (sc-166355 AF546), Alexa Fluor® 594 (sc-166355 AF594) or Alexa Fluor® 647 (sc-166355 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166355 AF680) or Alexa Fluor® 790 (sc-166355 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-166355 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

OctA-Probe (H-5) 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).

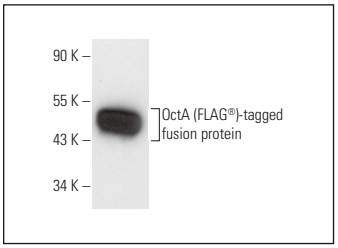
RECOMMENDED SUPPORT REAGENTS

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.

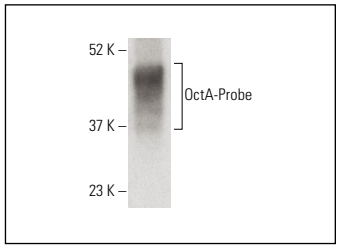
STORAGE

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

DATA



OctA-Probe (H-5): sc-166355. Western blot analysis of OctA (FLAG®)-tagged fusion protein.



OctA-Probe (H-5) HRP: sc-166355 HRP. Direct western blot analysis of OctA (FLAG®)-tagged fusion protein.

SELECT PRODUCT CITATIONS

1. Fuller, S.J., et al. 2012. A novel non-canonical mechanism of regulation of MST3 (mammalian Sterile20-related kinase 3). Biochem. J. 442: 595-610.
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3. Zhu, Y., et al. 2015. O-GlcNAc occurs cotranslationally to stabilize nascent polypeptide chains. Nat. Chem. Biol. 11: 319-325.
4. Wu, B.H., et al. 2016. Epigenetic silencing of JMJD5 promotes the proliferation of hepatocellular carcinoma cells by down-regulating the transcription of CDKN1A 686. Oncotarget 7: 6847-6863.
5. Zhao, H., et al. 2017. Calmodulin promotes matrix metalloproteinase 9 production and cell migration by inhibiting the ubiquitination and degradation of TBC1D3 oncoprotein in human breast cancer cells. Oncotarget 8: 36383-36398.
6. Bottega, R., et al. 2018. Hypomorphic FANCA mutations correlate with mild mitochondrial and clinical phenotype in Fanconi anemia. Haematologica 103: 417-426.
7. Wang, M., et al. 2019. Long noncoding RNA LINC00336 inhibits ferroptosis in lung cancer by functioning as a competing endogenous RNA. Cell Death Differ. 26: 2329-2343
8. Li, X., et al. 2020. A single-component light sensor system allows highly tunable and direct activation of gene expression in bacterial cells. Nucleic Acids Res. 48: e33.
9. Inoue, M., et al. 2020. Mechanisms for pituitary adenylate cyclase-activating polypeptide-induced increase in excitability in guinea-pig and mouse adrenal medullary cells. Eur. J. Pharmacol. 872: 172956.

RESEARCH USE

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