



CBP Tag (K-24): sc-33000

BACKGROUND

Plasmid vectors are commonly used for the expression of coding regions of eukaryotic genes in *E. coli*; such expression vectors often encode hybrid fusion proteins containing a eukaryotic specified protein fused on a tag protein. Antibodies specific for such fusion protein tags are useful for monitoring protein expression both in plaques and on Western immunoblots, as well as for immunoaffinity purification of proteins expressed in *E. coli*. Antibodies are offered to a range of fusion protein tags, including GST, His, Omni, b-Gal, S-probe, CBP, MBP-probe, Thio-probe, Luciferase, Green Fluorescent Protein (GFP), Yellow Fluorescent Protein (YFP) and the novel CruzTag series of fusion protein tags. Fields and coworkers have developed a unique "two-hybrid" system using GAL4 fusions in yeast to identify specific protein-protein interactions. The more recently developed Lex A system is a modification of the original Fields system. Antibodies are offered to several fusion protein tags that are used in yeast "two-hybrid" vectors, including GAL4-TA, GAL4(DBD), Lex A, B42, CBP and VP16.

REFERENCES

1. Neri, D., et al. 1995. Calmodulin as a versatile tag for antibody fragments. *Biotechnology* 13: 373-377.
2. Bourguignon, L.Y., et al. 2000. Ankyrin-Tiam1 interaction promotes Rac 1 signaling and metastatic breast tumor cell invasion and migration. *J. Cell Biol.* 150: 177-191.
3. Honey, S., et al. 2001. A novel multiple affinity purification Tag and its use in identification of proteins associated with a cyclin-CDK complex. *Nucleic. Acids. Res.* 29: E24.
4. Tsang, E.W., et al. 2003. Expression of a *Brassica napus* glutamate 1-semialdehyde aminotransferase in *Escherichia coli* and characterization of the recombinant protein. *Protein Expr. Purif.* 29: 193-201.
5. Egorov, M.V., et al. 2004. Purification of a recombinant membrane protein tagged with a calmodulin-binding domain: properties of chimeras of the *Escherichia coli* nicotinamide nucleotide transhydrogenase and the C-terminus of human plasma membrane Ca²⁺-ATPase. *Protein Expr. Purif.* 36: 31-39.
6. Lichty, J.J., et al. 2005. Comparison of affinity tags for protein purification. *Protein Expr. Purif.* 41: 98-105.

SOURCE

CBP Tag (K-24) is an affinity purified goat polyclonal antibody raised against a peptide mapping within the calmodulin binding peptide (CBP) region of the TAP (tandem affinity purification) tag of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-33000 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CBP Tag (K-24) is recommended for detection of the calmodulin binding peptide region of TAP tag fusion proteins 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941

SELECT PRODUCT CITATIONS

1. Cheong, C.Y., et al. 2011. In silico tandem affinity purification refines an Oct4 interaction list. *Stem Cell Res. Ther.* 2: 26.

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.

PROTOCOLS

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