# Cruz Tag 41<sup>™</sup> (C-12): sc-8602



The Power to Question

#### **BACKGROUND**

Plasmid vectors are commonly used for the expression of hybrid fusion proteins, encoding a protein of interest fused to an epitope tag. Antibodies specific for such fusion protein tags are useful for monitoring expression of the protein of interest, both in cells and in Western blot analysis. Such epitope tags in common use include Myc, GST, His, HA and GFP. Santa Cruz Biotechnology introduces a novel series of epitope tags, called the CruzTags. The CruzTag epitope tags are encoded by the pCruz mammalian expression vectors, a group of unique and effective vectors suitable for the production of recombinant tagged fusion proteins. Each pCruz expression vector encodes a unique, 12 amino acid CruzTag epitope sequence. Anti-CruzTag antibodies are suitable for detection and immunoprecipitation of recombinant fusion proteins containing the respective CruzTag.

# **SOURCE**

Cruz Tag 41™ (C-12) is available as either goat (sc-8602) or rabbit (sc-8602-R) polyclonal affinity purified antibody raised against a peptide mapping to the CruzcTag 41™ peptide domain of the pCruz 41 mammalian expression vector of fusion proteins encoded by the pCruz 41 mammalian expression vector of origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-8602 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-8602 AC, 500  $\mu$ g/0.25 ml agarose in 1 ml.

# **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.

#### **APPLICATIONS**

Cruz Tag 41<sup>™</sup> (C-12) is recommended for detection of fusion proteins encoded by the pCruz 41 mammalian expression vector of origin 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).

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: for goat primary antibody (sc-8602): use donkey anti-goat IgG-HRP: sc-2020 (range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (range: 1:2000-1:5000); for rabbit primary antibody (sc-8602-R): use goat anti-rabbit IgG-HRP: sc-2004 (range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (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: for goat primary antibody (sc-8602): use donkey anti-goat IgG-FITC: sc-2024 (range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (range: 1:100-1:400) for rabbit primary antibody (sc-8602-R): use goat anti-rabbit IgG-FITC: sc-2012 (range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (range: 1:100-1:400), with UltraCruz™ Mounting Medium: sc-24941.

#### pCRUZ FEATURES

- Series of mammalian expression vectors
- Cytomegalovirus (CMV) mammalian expression promoter
- Amino terminal fusion protein tag
- · Choice of eight fusion protein tags
- Flexible multiple cloning site
- Poly A signal
- Neomycin resistance gene for selection in stable mammalian expression systems
- Kanamycin resistance gene for selection in E. coli
- origin of replication for growth in *E. coli*
- Three reading frames provided, A, B and C, at 20 μg each, to allow subcloning in-frame with the amino terminal fusion protein tag
- pCruz vector with Lac Z insert provided as a positive control
- Broad selection of monoclonal and polyclonal antibodies available for detection of fusion proteins and fusion protein tags
- Agarose conjugated antibodies available for immunoprecipitation studies

# pCRUZ™ EXPRESSION VECTORS

PRODUCT	CAT. #	FUSION PROTEIN TAG	AMOUNT
pCruz 09™	sc-5040	Cruz Tag 09™	20 µg each
pCruz 22™	sc-5041	Cruz Tag 22™	20 μg each
pCruz 41™	sc-5042	Cruz Tag 41™	20 μg each

pCruz<sup>TM</sup> Expression Vectors are designed to facilitate the expression of recom-binant fusion proteins in mammalian cell lines.