**BACKGROUND**

T cell activation and immune function are regulated by the innate immune system through positive and negative costimulatory molecules. One such molecule, B7-H3 (B7-homolog 3, also designated B7RP-2) belongs to the B7 immunoglobulin superfamily. Soluble B7-H3 binds a putative receptor on activated T-cells that is distinct from CD28, CTLA-4, ICOS and PD-1. Widely expressed on nonlymphoid tissues, B7-H3 costimulates proliferation of both CD4+ and CD8+ T cells. The ability of B7-H3 to stimulate Th1 and cytotoxic-T cell responses suggest that it may have antitumor activity. B7-H3 interactions may play a role in regulating cell-mediated immune responses against cancer, implicating B7-H3 as a potential therapeutic tool.

**CHROMOSOMAL LOCATION**

Genetic locus: CD276 (human) mapping to 15q24.1; Cd276 (mouse) mapping to 9 B.

**SOURCE**

B7-H3 (F-11) is a mouse monoclonal antibody raised against amino acids 186-465 mapping within an N-terminal extracellular domain of B7-H3 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

B7-H3 (F-11) is available conjugated to agarose (sc-376769 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376769 HRP), 200 µg/ml, for WB, HCP, and ELISA; to either phycoerythrin (sc-376769 PE), fluorescein (sc-376769 FITC), Alexa Fluor® 488 (sc-376769 AF488), Alexa Fluor® 546 (sc-376769 AF546), Alexa Fluor® 594 (sc-376769 AF594) or Alexa Fluor® 647 (sc-376769 AF647), 200 µg/ml, for WB (RGB), IF, HCP and FCM; and to either Alexa Fluor® 680 (sc-376769 AF680) or Alexa Fluor® 790 (sc-376769 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

B7-H3 (F-11) is recommended for detection of B7-H3 of mouse, rat and human 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), 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).

Suitable for use as control antibody for B7-H3 siRNA (h): sc-45444, B7-H3 siRNA (m): sc-45445, B7-H3 shRNA Plasmid (h): sc-45444-SH, B7-H3 shRNA Plasmid (m): sc-45445-SH, B7-H3 shRNA (h) Lentiviral Particles: sc-45444-V and B7-H3 shRNA (m) Lentiviral Particles: sc-45445-V.

Molecular Weight of B7-H3 isoforms: 57/34/53/57 kDa.

Molecular Weight of glycosylated B7-H3: 90-110 kDa.

Positive Controls: JAR cell lysate: sc-2276 or JEG-3 whole cell lysate: sc-364255.

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

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

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