Ox40 (BER-Act35): sc-20073

**BACKGROUND**

Ox40 (also designated CD134 and Ox40R), is a member of the tumor necrosis factor receptor (TNFR) family. Ox40 is involved in coordinating CD4 T cell selection, migration and cytokine differentiation in T helper Th1 and Th2 cells. Ox40 is also involved in the stimulation of T cells, T cell-dependent humoral response and generation of optimal CD4+ T cell responses in vivo and in vitro. Ox40 is expressed on activated CD4+ T lymphocytes, and its ligand, Ox40L, is found preferentially on activated B cells. Engagement of Ox40 with its ligand, Ox40L, delivers a strong costimulatory signal to effector T cells. Members of the TNFR superfamily are critically involved in the regulation of infections, inflammation, autoimmune diseases and tissue homeostasis.

**CHROMOSOMAL LOCATION**

Genetic locus: TNFRSF4 (human) mapping to 1p36.33.

**SOURCE**

Ox40 (BER-Act35) is a mouse monoclonal antibody raised against HuT 102 T cells.

**PRODUCT**

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

Ox40 (BER-Act35) is available conjugated to agarose (sc-20073 AC), 500 µg/0.25 ml agarose in 1 ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-20073 PE), Alexa Fluor® 488 (sc-20073 AF488), Alexa Fluor® 546 (sc-20073 AF546), Alexa Fluor® 594 (sc-20073 AF594) or Alexa Fluor® 647 (sc-20073 AF647), 200 µg/ml, for Western Blotting (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-20073 AF680) or Alexa Fluor® 790 (sc-20073 AF790), 200 µg/ml, for Near-Infrared (NIR) Western Blotting (RGB), IF and FCM.

**STORAGE**

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

**APPLICATIONS**

Ox40 (BER-Act35) is recommended for detection of Ox40 of human 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]), 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 flow cytometry (1 µg per 1 x 10^6 cells).

Suitable for use as control antibody for Ox40 siRNA (h): sc-42822, Ox40 shRNA Plasmid (h): sc-42822-SH and Ox40 shRNA (h) Lentiviral Particles: sc-42822-V.

Molecular Weight of Ox40: 43 kDa.

Positive Controls: HuT 78 whole cell lysate: sc-2208, Jurkat whole cell lysate: sc-2204 or U-937 cell lysate: sc-2239.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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 Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).


**DATA**

- Ox40 (BER-Act35) sc-20073. Western blot analysis of Ox40 expression in HuT 78 whole cell lysate.
- Ox40 (BER-Act35) sc-20073. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing membrane and cytoplasmic staining of non-follicle cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

**SELECT PRODUCTION 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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