CD83 (HB15a): sc-19677

**BACKGROUND**

CD83 is a heavily glycosylated membrane protein of the immunoglobulin (Ig) superfamily that is expressed in mature dendritic cells, Langerhans cells and interdigitating reticulum cells within lymphoid tissues. Structurally, CD83 resembles other Ig superfamily members, which have an extracellular V-type Ig-like domain, a single transmembrane domain and a 40 residue cytoplasmic tail. CD83 expression is used as a marker for mature, antigen presenting dendritic cells that are capable of generating tumor specific T cell immunity, a phenotype with implications as an anti-cancer vaccine. CD83-IgG1(fc) chimera studies indicate that CD83 is a sialic acid-binding, Ig-like lectin (Siglec) adhesion molecule that is involved in cell adhesion/signaling by hosting dendritic cell interactions with monocytes and CD8+ T cells.

**CHROMOSOMAL LOCATION**

Genetic locus: CD83 (human) mapping to 6p23.

**SOURCE**

CD83 (HB15a) is a mouse monoclonal antibody raised against COS cells transfected with HB15 cDNA.

**PRODUCT**

Each vial contains 200 µg IgG2b, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azure-free for activation, sc-19677 L, 200 µg/0.1 ml.

CD83 (HB15a) is available conjugated to agarose (sc-19677 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-19677 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-19677 PE), fluorescein (sc-19677 FITC), Alexa Fluor® 488 (sc-19677 AF488), Alexa Fluor® 546 (sc-19677 AF546), Alexa Fluor® 594 (sc-19677 AF594) or Alexa Fluor® 647 (sc-19677 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-19677 AF680) or Alexa Fluor® 790 (sc-19677 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

CD83 (HB15a) is recommended for detection of CD83 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 CD83 siRNA (h): sc-42808, CD83 shRNA Plasmid (h): sc-42808-SH and CD83 shRNA (h) Lentiviral Particles: sc-42808-V.

Molecular Weight of CD83 precursor: 32 kDa.

Molecular Weight of glycosylated CD83: 45-60 kDa.

Positive Controls: CD83 (h2): 293T Lysate: sc-19673, K-562 whole cell lysate: sc-2203 or MOLT-4 cell lysate: sc-2233.

**STORAGE**

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

**DATA**

CD83 (HB15a): sc-19677. Western blot analysis of CD83 expression in non-transfected: sc-117522 (A) and human CD83 transfected: sc-175341 (B). 293T whole cell lysates.

**SELECT PRODUCT CITATIONS**


