SANTA CRUZ BIOTECHNOLOGY, INC.

CD155 (SKII.4): sc-53572



BACKGROUND

CD155, a member of the immunoglobulin superfamily, acts as the human receptor for poliovirus (PV). All three serotypes of PV- PV1, 2, and 3- exhibit similar binding to CD155 in both its glycosylated and fully deglycosylated forms, indicating they utilize a common mechanism for cell entry. Additionally, CD155 undergoes cell-matrix contacts by binding to the matrix protein vitronectin. Along with the receptor form, three soluble isoforms, α β , and γ , also exist in human serum and cerebrospinal fluid, and CD155 mRNAs are highly expressed in liver tissue. The presence of soluble CD155 reduces polivirus entry mediated by the membrane-bound receptor, implying an important role for these soluble forms in cellular function.

REFERENCES

- 1. Baury, B., et al. 2003. Identification of secreted CD155 isoforms. Biochem. Biophys. Res. Commun. 309: 175-182.
- Ravens, I., et al. 2003. Characterization and identification of Tage4 as the murine orthologue of human poliovirus receptor/CD155. Biochem. Biophys. Res. Commun. 312: 1364-1371.
- 3. He, Y., et al. 2003. Complexes of poliovirus serotypes with their common cellular receptor, CD155. J. Virol. 77: 4827-4835.
- 4. Mueller, S., et al. 2003. Recruitment of Nectin 3 to cell-cell junctions through *trans*-heterophilic interaction with CD155, a Vitronectin and poliovirus receptor that localizes to $\alpha_v \beta_3$ Integrin-containing membrane microdomains. J. Biol. Chem. 278: 31251-31260.
- Kakunaga, S., et al. 2004. Enhancement of serum- and platelet-derived growth factor-induced cell proliferation by Necl-5/Tage4/poliovirus receptor/CD155 through the Ras-Raf-MEK-ERK signaling. J. Biol. Chem. 279: 36419-36425.

CHROMOSOMAL LOCATION

Genetic locus: PVR (human) mapping to 19q13.31.

SOURCE

CD155 (SKII.4) is a mouse monoclonal antibody raised against the SK-N-S1 neuroblastoma cell line of human origin.

PRODUCT

Each vial contains 200 μg lgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD155 (SKII.4) is available conjugated to agarose (sc-53572 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-53572 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53572 PE), fluorescein (sc-53572 FITC), Alexa Fluor[®] 488 (sc-53572 AF488), Alexa Fluor[®] 546 (sc-53572 AF546), Alexa Fluor[®] 594 (sc-53572 AF594) or Alexa Fluor[®] 647 (sc-53572 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-53572 AF680) or Alexa Fluor[®] 790 (sc-53572 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

CD155 (SKII.4) is recommended for detection of CD155 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for CD155 siRNA (h): sc-61903, CD155 shRNA Plasmid (h): sc-61903-SH and CD155 shRNA (h) Lentiviral Particles: sc-61903-V.

Molecular Weight of CD155: 70 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or A549 cell lysate: sc-2413.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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 Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



CD155 (SKII.4): SC-53572. Western blot analysis of CD155 expression in A549 whole cell lysate under non-reducing conditions.

SELECT PRODUCT CITATIONS

- Moiseeva, E.P., et al. 2013. CADM1 is a key receptor mediating human mast cell adhesion to human lung fibroblasts and airway smooth muscle cells. PLoS ONE 8: e61579.
- 2. Zitti, B., et al. 2017. Innate immune activating ligand SUMOylation affects tumor cell recognition by NK cells. Sci. Rep. 7: 10445.

STORAGE

Store at 4° C, **D0 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.