

## **Human CD317(Tetherin)**

Cat No.: 03-01-2072

Product Name: Human CD317(Tetherin)

Description: IFN-induced antiviral host restriction factor which efficiently

blocks the release of diverse mammalian enveloped viruses

by directly tethering nascent virions to the membranes of

infected cells. Acts as a direct physical tether, holding

virions to the cell membrane and linking virions to each

other. The tethered virions can be internalized by

endocytosis and subsequently degraded or they can remain

on the cell surface. In either case, their spread as cell-free

virions is restricted. Its target viruses belong to diverse

families, including retroviridae: human immunodeficiency

virus type 1 (HIV-1), human immunodeficiency virus type 2

(HIV-2), simian immunodeficiency viruses (SIVs), equine

infectious anemia virus (EIAV), feline immunodeficiency

virus (FIV), prototype foamy virus (PFV), Mason-Pfizer

monkey virus (MPMV), human T-cell leukemia virus type 1

(HTLV-1), Rous sarcoma virus (RSV) and murine leukemia

virus (MLV), flavivirideae: hepatitis C virus (HCV),

filoviridae: ebola virus (EBOV) and marburg virus (MARV),

arenaviridae: lassa virus (LASV) and machupo virus

(MACV), herpesviridae: kaposis sarcoma-associated



herpesvirus (KSHV), rhabdoviridae: vesicular stomatitis virus (VSV), orthomyxoviridae: influenza A virus, and paramyxoviridae: nipah virus. Can inhibit cell surface proteolytic activity of MMP14 causing decreased activation of MMP15 which results in inhibition of cell growth and migration. Can stimulate signaling by LILRA4/ILT7 and consequently provide negative feedback to the production of IFN by plasmacytoid dendritic cells in response to viral infection. Plays a role in the organization of the subapical actin cytoskeleton in polarized epithelial cells. Isoform 1 and isoform 2 are both effective viral restriction factors but have differing antiviral and signaling activities. Isoform 2 is resistant to HIV-1 Vpu-mediated degradation and restricts HIV-1 viral budding in the presence of Vpu. Isoform 1 acts as an activator of NF-kappa-B and this activity is inhibited by isoform 2

Type: Protein

Property: Recombinant Protein

Source: HEK293

Genbank No.: Q10589 (aa.49-161)

Applications: ELISA, WB, Immunogen

Formulation: Each vial contains 50ug purified protein(1mg/ml) in

PBS(pH7.4).

Purity: >95%

Storage: Store at -80°C, Avoid freeze / thaw cycle.

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