

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD47 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant mouse CD47 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CD47 Gln19-Pro139 Accession # Q08722
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
Knockout Validated	Optimal dilution of this antibody should be experimentally determined.
Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

CD47 (also integrin-associated protein/IAP and OA3) is a variably glycosylated, 40-60 kDa atypical member of the Ig-Superfamily. It is expressed on almost all cell types, including erythrocytes. CD47 binds to TSP-1 and SIRPα, and forms a membrane complex with CD36 and α_vβ₃. Mature human CD47 is a 305 amino acid (aa), five-transmembrane glycoprotein. It contains a 123 aa extracellular region (aa 19-141) that is characterized by the presence of a V-type Ig-like domain (aa 19-127), and a 34 aa C-terminal cytoplasmic tail that interacts with G_{iα} subunits. Three splice variants occur over aa 293-323. Over aa 19-139, human CD47 shares 61%, 71% and 66% aa identity with mouse, porcine and canine CD47, respectively.

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