Human/Porcine/Canine CD90/Thy1 Alexa Fluor® 405-conjugated Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF2067V
100 µg

DESCRIPTION

Species Reactivity	Human/Porcine/Canine
Specificity	Detects human CD90/Thy1 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse CD90 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human CD90/Thy1 Gln20-Ser141 Accession # P04216
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	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

CD90 (also Thy1/Thymus cell antigen 1) is a 25-35 kDa glycoprotein member of the Immunoglobulin superfamily of molecules. It is expressed on neurons, ovarian follicular cells, endothelial cells, fibroblasts and circulating $CD34^+$ stem cells, and appears to act as an adhesion molecule. CD90 is known to bind to integrins β2, β5 and β3, the latter often accompanied by additional binding to syndecan-4. In the postnatal nervous system, this inhibits neurite outgrowth while stabilizing newly formed axonal networks. In the vascular system, CD90 mediates the extravasation of leukocytes. And in lung, a CD90:αvβ5 interaction inhibits the extracellular activation of latent TGF-β. Mature human CD90 is a 111 amino acid (aa) GPI-linked protein (aa 20-130). It contains one V-type Ig-like domain (aa 20-126) with a heparin-binding motif (aa 56-60), and a GPI-anchor amidated cysteine at position 130. The integrin binding site consists of an Arg35LeuAsp37 tripeptide. CD90 apparently forms 50-60 kDa homodimers and 150 kDa homomultimers. There is one potential isoform variant that contains a 12 aa substitution for aa 1-13. Over aa 20-141, human CD90 shares 64% aa identity with mouse CD90 and 84% or 83% with horse and dog respectively.

PRODUCT SPECIFIC NOTICES

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