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Goat Anti-CD74 Antibody (internal region)

Purified Goat Polyclonal Antibody
Catalog # AF4182a

Specification

Goat Anti-CD74 Antibody (internal region) - Product Information

Application	**WB**
Primary Accession	P04233
Other Accession	NP_001020330.1, NP_004346.1
Reactivity	**Human**
Predicted	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5**
Calculated MW	**33516**

Goat Anti-CD74 Antibody (internal region) - Additional Information

Gene ID 972

Other Names
CD74; DHLAG; HLADG; Ia-GAMMA; CD74 molecule, major histocompatibility complex, class II invariant chain; CD74 antigen; CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen-associated); HLA-DR-gamma; Ia-associated invariant chain; MHC HLA-DR gamma chain; gamma chain of class II antigens

Format
Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Immunogen
Peptide with sequence C-KGSFPENLRHLKN, from the internal region of the protein sequence according to NP_001020330.1; NP_004346.1.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-CD74 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-CD74 Antibody (internal region) - Protein Information

Name CD74 (HGNC:1697)

Synonyms DHLAG

Function
Plays a critical role in MHC class II antigen processing by stabilizing peptide-free class II alpha/beta heterodimers in a complex soon after their synthesis and directing transport of the complex from the endoplasmic reticulum to the endosomal/lysosomal system where the antigen processing and binding of antigenic peptides to MHC class II takes place. Serves as cell surface receptor for the cytokine MIF. [Isoform p41]: Stabilizes the conformation of mature CTSL by binding to its active site and serving as a chaperone to help maintain a pool of mature enzyme in endocytic compartments and extracellular space of antigen-presenting cells (APCs). Has antiviral activity by stymieing the endosomal entry of Ebola virus and coronaviruses, including SARS-CoV-2 (PubMed:32855215). Disrupts cathepsin-mediated Ebola virus glycoprotein processing, which prevents viral fusion and entry. This antiviral activity is specific to p41 isoform (PubMed:32855215).

Cellular Location
Cell membrane; Single-pass type II membrane protein. Endoplasmic reticulum membrane. Golgi apparatus, trans-Golgi network. Endosome. Lysosome. Secreted. Note=Transits through a number of intracellular compartments in the endocytic pathway. It can either undergo proteolysis or reach the cell membrane

Tissue Location
Detected in urine (at protein level). [Isoform p33]: In B cells, represents 70% of total CD74 expression.

Goat Anti-CD74 Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-CD74 Antibody (internal region) - Images

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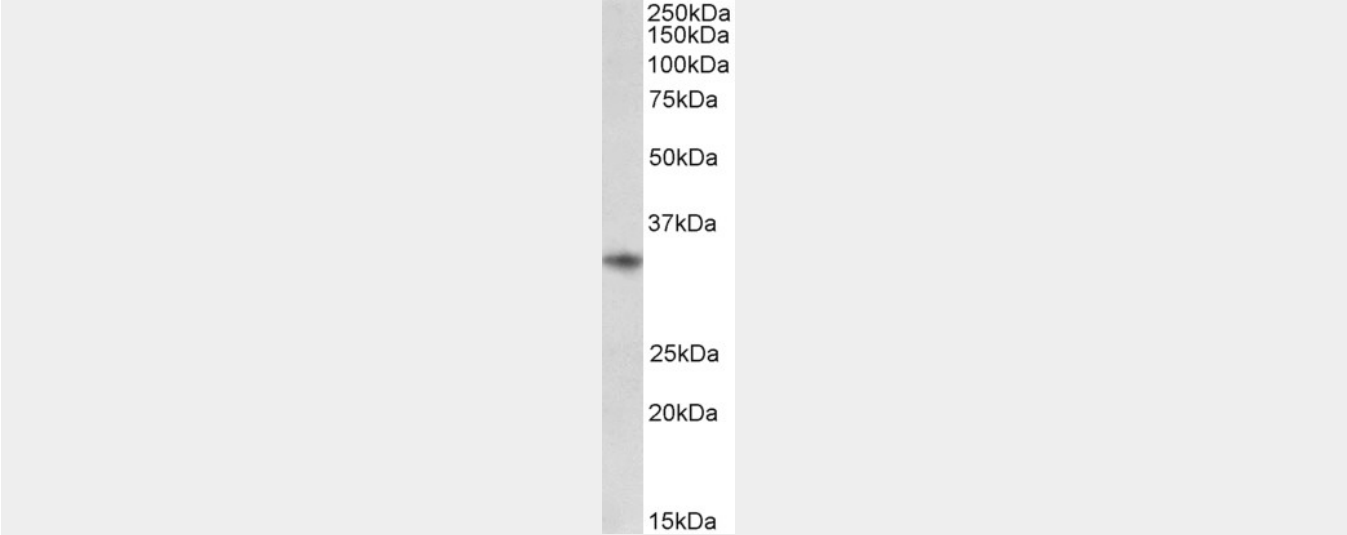

AF4182a (0.01 µg/ml) staining of Human Tonsil lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-CD74 Antibody (internal region) - References

CD74: a potential novel target for triple-negative breast cancer. Tian B, Zhang Y, Li N, Liu X, Dong J. Tumour biology : the journal of the International Society for Oncodevelopmental Biology and Medicine 2012 Dec 33 (6): 2273-7.