abcam

ab240782

Anti-CD164 antibody [67D2]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.0975% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing CD164 protein. The exact immunogen used to generate this antibody is proprietary information. Database link Q04900
Clone number	67D2
Purification technique	Affinity purification Protein A
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from hybridoma culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1-4 µg/mL
Notes	-

Target data

See full target information CD164

Function	Sialomucin that may play a key role in hematopoiesis by facilitating the adhesion of CD34(+) cells to the stroma and by negatively regulating CD34(+)CD38(lo/-) cell proliferation. Modulates the migration of umbilical cord blood CD133+ cells and this is mediated through the CXCL12/CXCR4 axis. May play an important role in prostate cancer metastasis and the infiltration of bone marrow by cancer cells. Promotes myogenesis by enhancing CXCR4-dependent cell motility. Positively regulates myoblast migration and promotes myoblast fusion into myotubes (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CD164 also known as endolyn is a sialomucin protein with a molecular weight of approximately 80 to 90 kDa. It is a cell surface glycoprotein found on hematopoietic progenitor cells stromal cells epithelial cells and certain cancer cells. The expression of CD164 plays a part in the regulation of adhesion migration and cellular localization which affects cell proliferation and tissue development. It acts as a high-affinity receptor for novel inflammatory cytokines and modulates interactions with other cellular molecules.
Biological function summary	CD164 influences the adhesive properties within specific cellular environments. It contributes to the formation of complexes with other cellular proteins to modulate cell communication and migration. The interaction of CD164 with integrins and cell surface receptors regulates cellular trafficking. It influences the behavior of cells at high confluency which impacts how these cells aggregate and differentiate in tissue structures.

Pathways	More than four biochemical interactions influence CD164's role in controlling cellular movement and tissue architecture. It plays a significant role in the chemokine signaling pathway affecting memory B-cell homing. Furthermore CD164 is linked with the transforming growth factor-beta (TGF-beta) pathway through its association with integrins which regulates numerous cellular processes such as growth and development. By modulating these pathways it participates in the body's response to injury and inflammation.
Associated diseases and disorders	Aberrant CD164 expression or function has been linked to various pathological conditions. For instance changes in CD164 levels are observed in certain leukemia types where its overexpression may contribute to abnormal cell growth and survival. Additionally its interaction with proteins like CXCR4 has implications in the metastasis of breast cancer enhancing the invasiveness of cancer cells. Therefore CD164's involvement in these diseases highlights its potential as a therapeutic target in cancer research.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

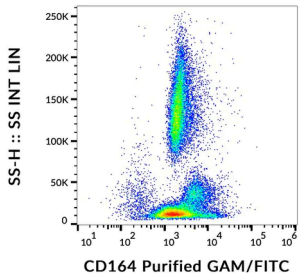
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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1 product image



Flow Cytometry - Anti-CD164 antibody [67D2] (ab240782)

CD164 Flow Cytometry staining using mouse Anti-CD164 antibody

Flow cytometric analysis of human peripheral blood cells labeling CD164 using ab240782, followed by Goat-Anti Mouse (APC).
Gated on human leukocytes. Overlay between specific antibody signal (red) and background signal (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.