

10-7516: Monoclonal antibody to CD44 (Clone: 156-3C11)

Clonality :	Monoclonal
Clone Name :	156-3C11
Application :	IHC,FACS,WB,IF
Reactivity :	Human
Gene :	CD44
Gene ID :	960
Uniprot ID :	P16070
Format :	Purified
Alternative Name :	CD44,LHR,MDU2,MDU3,MIC4
Isotype :	Mouse IgG2a Kappa
Immunogen Information :	Stimulated human Leukocytes were taken as the immunogen for this antibody.

Description

CD44 is a multifunctional class I transmembrane glycoprotein that generally acts as a specific receptor for hyaluronic acid, and is responsible for mediating communication and adhesion between adjacent cells and between cells and the extracellular matrix (ECM). It is mainly associated with proteins that monitor the extracellular changes and critical in regulating cell adhesion, proliferation, growth, survival, motility, migration, angiogenesis, and differentiation. Also, CD44 presents cytokines and chemokines to their complimentary receptors on the cellular membrane. CD44 is expressed on the surface of numerous cell types, including leukocytes, fibroblasts, epithelial cells and endothelial cells. Its expression is upregulated on naive T cells after activation via the T cell receptor (TCR) and high expression is maintained indefinitely on memory cells. CD44 interacts with osteopontin and regulates its cellular functions leading to tumour progression. It even interacts with collagen, laminin, and fibronectin where their physiological function is unclear. CD44 is expressed on cancer cell surface and assist haematogenous spread while interacting with P- or L-selectins. It is involved in many types of cancers, including breast, lung, prostate, ovarian, cervical, and colorectal cancers and neuroblastoma. In combination with other surface markers, CD44 can also discriminate between a variety of cancer subsets.

Product Info

Amount :	25 µg / 100 µg
Purification :	Protein G Chromatography
Content :	25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Western blot analysis: 2-4 µg/ml, FACS analysis: 0.5-1 µg/10⁶ cells, Immunohistochemistry: 10-15 µg/ml, Immuno fluorescence: 1 mg/ml.

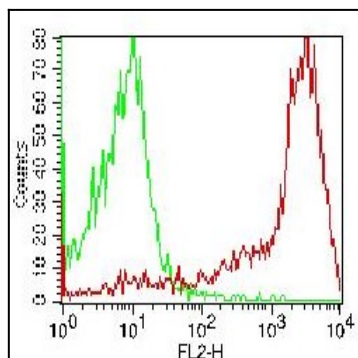


Fig:1- Cell Surface flow analysis of hCD44 in PBMC (Lymphocytes gated) using 0.5 μ g antibody per 10^6 cells. Green represents isotype control (ABEOMICS); red represents anti-hCD44 antibody (10-7516). Goat anti-mouse PE conjugated secondary antibody was used (ABEOMICS).

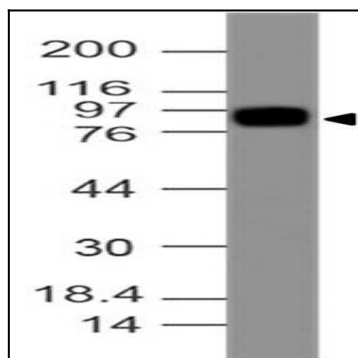


Fig:2- Expression analysis of CD44. Anti-CD44 antibody (Clone: 156-3C11) was tested at 2 μ g/ml on h Lungs lysate.

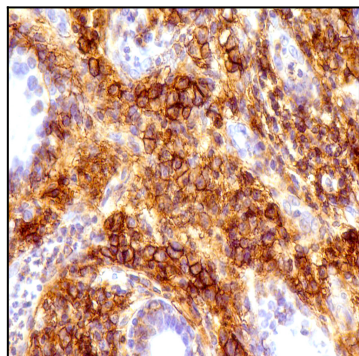


Fig:3: Immunohistochemical analysis of CD44 antibody in human Breast carcinoma tissue using 10 μ g/ml of Anti-hCD44 (Clone: 156-3C11).

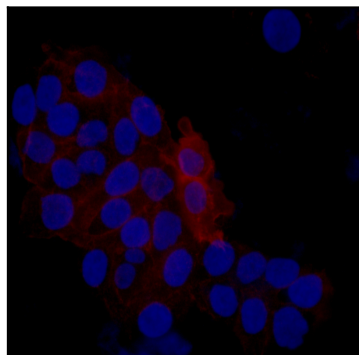


Fig:4: CAL33 cells were stained with CD44 antibody at 1mg/ml concentration followed by secondary alexa fluor 568 (1:500) and imaged with fluorescence microscope (400X).