

Anti-B7-H4(VTCN1) Antibody

R1512-1



Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, IF-Cell, IHC-P, FC
Molecular Wt:	Predicted band size: 31 kDa

Description: T cell activation and immune function are regulated by the innate immune system through positive and negative costimulatory proteins. One such protein, B7-H4 (B7-homolog 4, also designated VTCN1), belongs to the B7 Immunoglobulin superfamily of ligand-lymphocyte interacting proteins. Expressed primarily on the membrane of lymphoid cells, B7-H4 is an immunoinhibitory protein that interacts with receptors on the surface of T lymphocytes, thus mediating cellular and humoral immune responses. Overexpression of the B7-H4 protein is associated with certain malignancies, including ovarian and breast cancer, as its interaction with T cells suppresses tumor-associated immunity. Current research suggests that, similar to Mucin 16 (CA125), B7-H4 may be a useful biomarker for the early detection of ovarian cancer.

Immunogen: Recombinant protein within Human B7-H4 aa 65-226 / 282.

Positive control: SK-Br-3 cell lysate, human liver tissue lysate, mouse testis tissue lysate, mouse spleen tissue lysate, Hela, MCF-7, SK-Br-3, human tonsil tissue, human lung cancer tissue, Jurkat.

Subcellular location: Cell membrane.

Database links: SwissProt: Q7Z7D3 Human | Q7TSP5 Mouse

Recommended Dilutions:

WB	1:500-1:1,000
IF-Cell	1:50-1:200
IHC-P	1:50-1:200
FC	1:50-1:200

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders: 0086-571-88062880

Technical: 0086-571-89986345

Service mail: support@huabio.cn

 华安生物
HUABIO
www.huabio.cn

Applications: WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

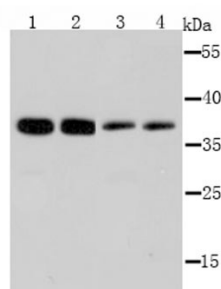


Fig1: Western blot analysis of B7-H4 on different lysate using anti-B7-H4 antibody at 1/1,000 dilution.

Positive control:

Lane 1: SK-Br-3 cell lysate

Lane 2: Human liver tissue lysate

Lane 3: Mouse testis tissue lysate

Lane 4: Mouse spleen tissue lysate

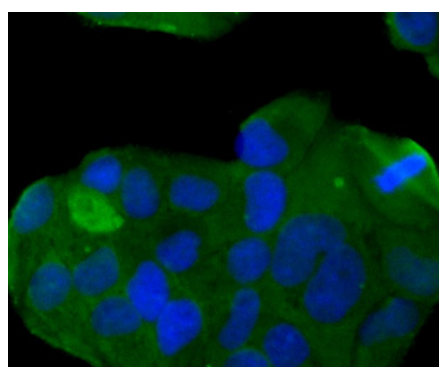


Fig2: ICC staining B7-H4 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

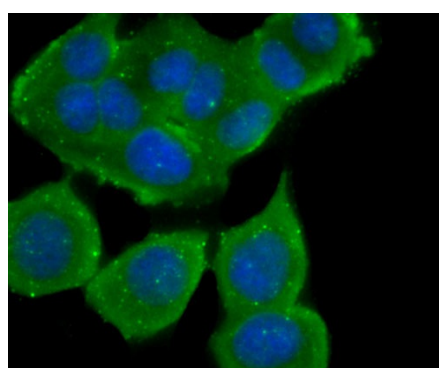


Fig3: ICC staining B7-H4 in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

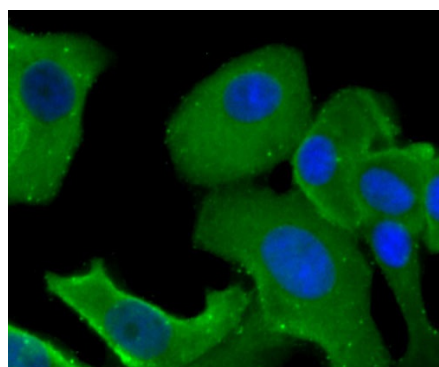


Fig4: ICC staining B7-H4 in SK-Br-3 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

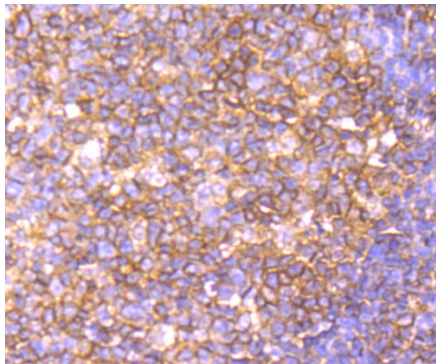


Fig5: Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti- B7-H4 antibody. Counter stained with hematoxylin.

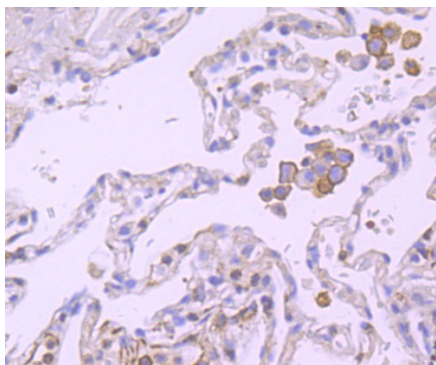


Fig6: Immunohistochemical analysis of paraffin-embedded human lung cancer tissue using anti-B7-H4 antibody. Counter stained with hematoxylin.

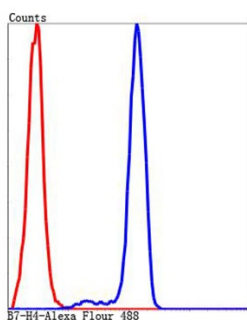


Fig7: Flow cytometric analysis of Jurkat cells with B7-H4 antibody at 1/100 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Huang H et al. Clinical significance of the B7-H4 as a novel prognostic marker in breast cancer. Gene 623:24-28 (2017).
2. Bregar A et al. Characterization of immune regulatory molecules B7-H4 and PD-L1 in low and high grade endometrial tumors. Gynecol Oncol 145(3):446-452 (2017).

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation