

# Anti-HLA Class 1 ABC Antibody [11C3]

EM1801-09



<b>Product Type:</b>	Mouse monoclonal IgG1, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	WB, IF-Cell, IHC-P
<b>Molecular Wt:</b>	Predicted band size: 40 kDa
<b>Clone number:</b>	11C3

**Description:** HLA-B belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). The heavy chain is anchored in the membrane. Class I molecules play a central role in the immune system by presenting peptides derived from the endoplasmic reticulum lumen. They are expressed in nearly all cells. The heavy chain is approximately 45 kDa and its gene contains 8 exons. Exon 1 encodes the leader peptide, exon 2 and 3 encode the alpha1 and alpha2 domains, which both bind the peptide, exon 4 encodes the alpha3 domain, exon 5 encodes the transmembrane region and exons 6 and 7 encode the cytoplasmic tail. Polymorphisms within exon 2 and exon 3 are responsible for the peptide binding specificity of each class one molecule. Typing for these polymorphisms is routinely done for bone marrow and kidney transplantation. Hundreds of HLA-B alleles have been described.

**Immunogen:** Recombinant protein within Human HLA Class 1 ABC aa 1-362 / 362.

**Positive control:** CAL-62 cell lysate, HeLa cell lysate, HepG2 cell lysate, human liver tissue, 293T.

**Subcellular location:** Cell Membrane, Endoplasmic reticulum membrane.

**Database links:** SwissProt: P04439 Human | P01889 Human | P10321 Human

**Recommended Dilutions:**

<b>WB</b>	1:1,000-1:2000
<b>IF-Cell</b>	1:50-1:200
<b>IHC-P</b>	1:5,000

**Storage Buffer:** 1\*PBS (pH7.4), 0.2% BSA, 50% 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:** Immunogen affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

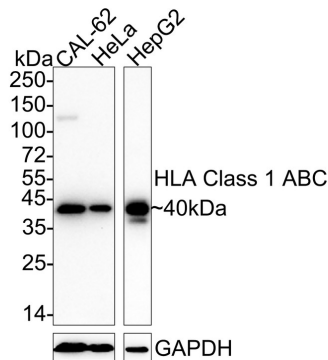
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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

**Fig1:** Western blot analysis of HLA Class 1 ABC on different lysates with Mouse anti-HLA Class 1 ABC antibody (EM1801-09) at 1/1,000 dilution.

Lane 1: CAL-62 cell lysate  
Lane 2: HeLa cell lysate  
Lane 3: HepG2 cell lysate



Lysates/proteins at 20 µg/Lane.

Predicted band size: 40 kDa  
Observed band size: 40 kDa

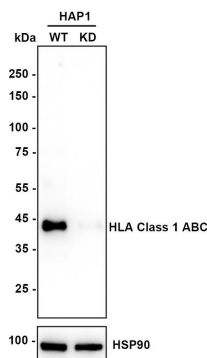
Exposure time: 3 minutes; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (EM1801-09) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

**Fig2:** Western blot analysis of HLA Class 1 ABC on different lysates with Mouse anti-HLA Class 1 ABC antibody (EM1801-09) at 1/2,000 dilution.

Lane 1: HAP1-parental cell lysate  
Lane 2: HAP1-HLA Class 1 ABC KD cell lysate



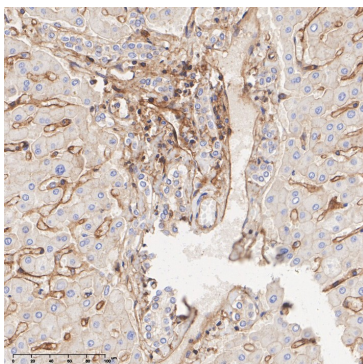
Lysates/proteins at 10 µg/Lane.

Predicted band size: 40 kDa  
Observed band size: 40 kDa

Exposure time: 60 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (EM1801-09) at 1/2,000 dilution was used in K1803 at 4°C overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.



**Fig3:** Immunohistochemical analysis of paraffin-embedded human liver tissue with Mouse anti-HLA Class 1 ABC antibody (EM1801-09) at 1/5,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (EM1801-09) at 1/5,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

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

### Background References

1. Mordoh J et al. Phase II Study of Adjuvant Immunotherapy with the CSF-470 Vaccine Plus Bacillus Calmette-Guerin Plus Recombinant Human Granulocyte Macrophage-Colony Stimulating Factor vs Medium-Dose Interferon Alpha 2B in Stages IIB, IIC, and III Cutaneous Melanoma Patients: A Single Institution, Randomized Study. *Front Immunol* 8:625 (2017).
2. Pavese A et al. A 3D microfluidic model for preclinical evaluation of TCR-engineered T cells against solid tumors. *JCI Insight* 2(12). pii: 89762 (2017).

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