

## Purified Anti-Human HLA-G Antibody[87G], Functional Grade

catalog number: AN002910

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

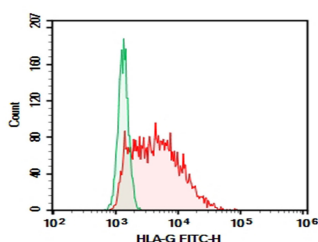
|                     |   |
|---------------------|---|
| <b>Reactivity</b>   | Human   |
| <b>Immunogen</b>    | Recombinant Human HLA-G protein   |
| <b>Host</b>         | Mouse   |
| <b>Isotype</b>      | Mouse IgG2a, κ  |
| <b>Clone</b>        | 87G   |
| <b>Purification</b> | >98%, Protein A/G purified  |
| <b>Buffer</b>       | Sterile PBS, pH 7.2. < 1.0 EU per mg of the antibody as determined by the LAL method. |

### Applications

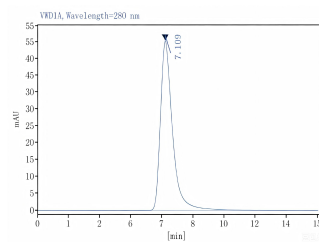
### Recommended Dilution

|            |  |
|------------|--|
| <b>FCM</b> | 2 µg/mL (0.5×10 <sup>6</sup> -1×10 <sup>6</sup> cells) |
|------------|--|

### Data



JEG3 were stained with 0.2 µg AF/LE Purified Anti-Human HLA-G Antibody[87G] (Right) and 0.2 µg Mouse IgG2a, κ Isotype Control (Left), followed by FITC-conjugated Goat Anti-Mouse IgG Secondary Antibody.



Monomer purity ≥95% as determined by analytical size-exclusion chromatography (SEC)

### Preparation & Storage

|                 |  |
|-----------------|--|
| <b>Storage</b>  | Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles. This preparation contains no preservatives, thus it should be handled under aseptic conditions. |
| <b>Shipping</b> | Ice bag  |

### Background

#### For Research Use Only

HLA-G Antibody (4H84) is an IgG1  $\kappa$  mouse monoclonal HLA-G antibody (also designated HLA major histocompatibility complex, class I, G antibody, human leukocyte antigen (HLA) G antibody, 45 kDa transmembrane class I human leukocyte antigen G antibody, chromosome 6p22 gene complex class 1G antibody, placenta trophoblast marker antibody, or fetal derived placental cell marker antibody) that detects the HLA-G protein of mouse, rat and human origin by WB, IP, IF and IHC(P). HLA-G Antibody (4H84) is available as both the non-conjugated anti-HLA-G antibody form, as well as multiple conjugated forms of anti-HLA-G antibody, including agarose, HRP, PE, FITC and multiple Alexa Fluor® conjugates. Major histocompatibility complex (MHC), human leukocyte antigen (HLA) molecules are cell-surface receptors that bind foreign peptides and present them to T lymphocytes. MHC class I molecules consist of two polypeptide chains, an  $\alpha$  or heavy chain, and a non-covalently associated protein,  $\beta$ -2-microglobulin. Cytotoxic T lymphocytes bind antigenic peptides presented by MHC class I molecules. Antigens that bind to MHC class I molecules are typically 8-10 residues in length and are stabilized in a peptide binding groove. MHC class II molecules are encoded by polymorphic MHC genes and consist of a non-covalent complex of an  $\alpha$  and  $\beta$  chain. Helper T lymphocytes bind antigenic peptides presented by MHC class II molecules. MHC class II molecules bind 13-18 amino acid antigenic peptides. Accumulating in endosomal/lysosomal compartments and on the surface of B cells, HLA-DM and -DO molecules regulate binding of exogenous peptides to class II molecules (HLA-DR) by sustaining a conformation that favors peptide exchange. The differential structural properties of MHC class I and class II molecules account for their respective roles in activating different populations of T lymphocytes.

None (Azide-Free, Low Endotoxin) are perfectly suited to be used in culture or in vivo (for nonhuman studies) for functional assays blocking, neutralizing, activation or depletion where the presence of azide may damage cells or exogenous endotoxin may signal or activate cells.