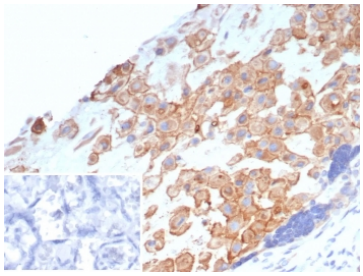
MHC class I antigen G Antibody / HLA-G [clone HLAG/7749] (V5734)

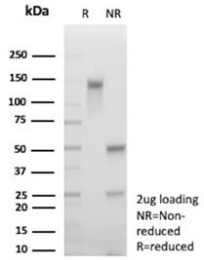
Catalog No.	Formulation	Size
V5734-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5734-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5734SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	HLAG/7749
Purity	Protein G affinity
UniProt	P17693
Localization	Cell surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This MHC class I antigen G antibody is available for research use only.



IHC staining of FFPE human placental tissue with MHC class I antigen G antibody (clone HLAG/7749). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free MHC class I antigen G antibody (clone HLAG/7749) as confirmation of integrity and purity.

Description

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 a or heavy chain, and a non-covalently associated protein, ÃŽÂ²2-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 noncovalent complex of an a and b 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.

Application Notes

Optimal dilution of the MHC class I antigen G antibody should be determined by the researcher.

Immunogen

A portion of amino acids 1-200 from human HLAG protein was used as the immunogen for the MHC class I antigen G antibody.

Storage

Aliquot the MHC class I antigen G antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.