

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects a synthetic peptide specific for human VISTA/B7-H5/PD-1H around amino acid 100 in Direct ELISA.
Source	Recombinant Monoclonal Rabbit IgG Clone # 3180A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Synthetic peptide Accession # Q9H7M9
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

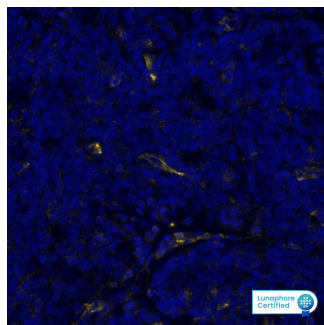
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Human placenta
Multiplex Immunofluorescence	5 µg/mL	Immersion fixed paraffin-embedded sections of human Hodgkin's Lymphoma and human Mantle Cell Lymphoma
Immunohistochemistry	0.5-10 µg/mL	Immersion fixed paraffin-embedded sections of human lymph node and tonsil

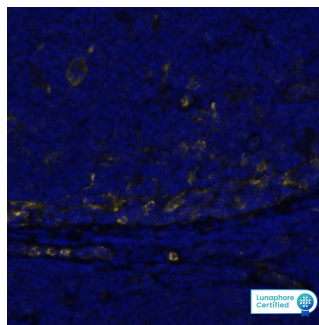
DATA

Multiplex Immunofluorescence



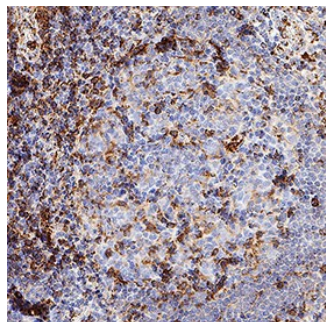
Detection of VISTA in Human Hodgkin's Lymphoma via seqIF™ staining on COMET™
VISTA was detected in immersion fixed paraffin-embedded sections of human Hodgkin's Lymphoma using Rabbit Anti-Human VISTA, Monoclonal Antibody (Catalog # MAB11712) at 5µg/mL at 27° Celsius for 2 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; EpreDia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ Plus 647 Goat anti-Rabbit IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647RB) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the membrane and cytoplasm. Protocol available in COMET™ Panel Builder.

Multiplex Immunofluorescence



Detection of VISTA in Human Mantle Cell Lymphoma via seqIF™ staining on COMET™
VISTA was detected in immersion fixed paraffin-embedded sections of human Mantle Cell Lymphoma using Rabbit Anti-Human VISTA, Monoclonal Antibody (Catalog # MAB11712) at 5µg/mL at 27° Celsius for 2 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; EpreDia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ Plus 647 Goat anti-Rabbit IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647RB) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the membrane and cytoplasm. Protocol available in COMET™ Panel Builder.

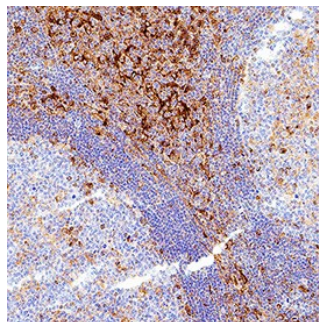
Immunohistochemistry



Detection of VISTA/B7-H5/PD-1H in Human Lymph Node.

VISTA/B7-H5/PD-1H was detected in immersion fixed paraffin-embedded sections of human lymph node using Rabbit Anti-Human VISTA/B7-H5/PD-1H Monoclonal Antibody (Catalog # MAB11712) at 0.5 µg/ml for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC003) or the HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the cell surface. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

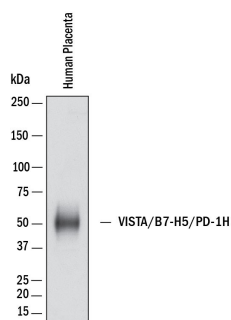
Immunohistochemistry



Detection of VISTA/B7-H5/PD-1H in Human Tonsil.

VISTA/B7-H5/PD-1H was detected in immersion fixed paraffin-embedded sections of human tonsil using Rabbit Anti-Human VISTA/B7-H5/PD-1H Monoclonal Antibody (Catalog # MAB11712) at 0.5 µg/ml for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC003) or the HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the cell surface. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

Western Blot



Detection of Human VISTA/B7-H5/PD-1H by Western Blot.

Western Blot shows lysates of human placenta. PVDF membrane was probed with 1 µg/ml of Rabbit Anti-Human VISTA/B7-H5/PD-1H Monoclonal Antibody (Catalog # MAB11712) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for VISTA/B7-H5/PD-1H at approximately 55 kDa (as indicated). This experiment was conducted under reducing conditions and using [Western Blot Buffer Group 1](#).

PREPARATION AND STORAGE

Reconstitution Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.

Shipping Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Platelet Receptor Gi24, also known as VISTA (V-domain Ig suppressor of T cell activation), B7-H5, B7H5, Dies1 (Differentiation of ESC-1), SISP1 and C10orf54, is a 55-65 kDa member of the Ig superfamily. It is a transmembrane molecule expressed in bone, on embryonic stem cells (ESCs), and on tumor cell surfaces. On ESCs, Gi24 appears to positively interact with BMP-4, potentiating BMP signaling and the transition from an undifferentiated to a differentiated state. On tumor cells, Gi24 both promotes MT1-MMP expression and activity and serves as a substrate for MT1-MMP. This increases the potential for cell motility. Mature human Gi24 contains a 162 aa extracellular region with one V-type Ig-like domain and a 96 aa cytoplasmic domain. Human Gi24 undergoes proteolytic cleavage by MT1-MMP, generating a soluble 30 kDa extracellular fragment plus a 25-30 kDa membrane-bound fragment. Over aa 33-194, human Gi24 shares 70% and 67% aa identity with mouse and rat Gi24, respectively.