Product datasheet for TA368504

HLA-H Rabbit Polyclonal Antibody

Product data:
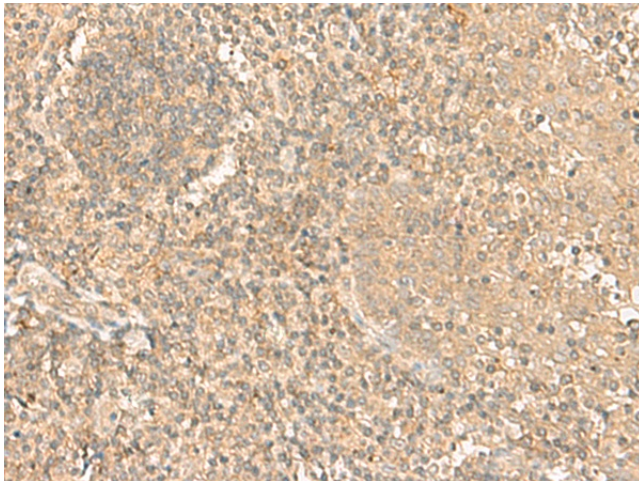
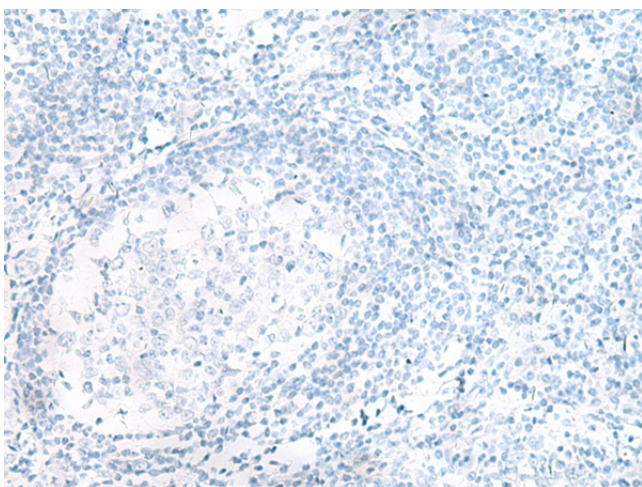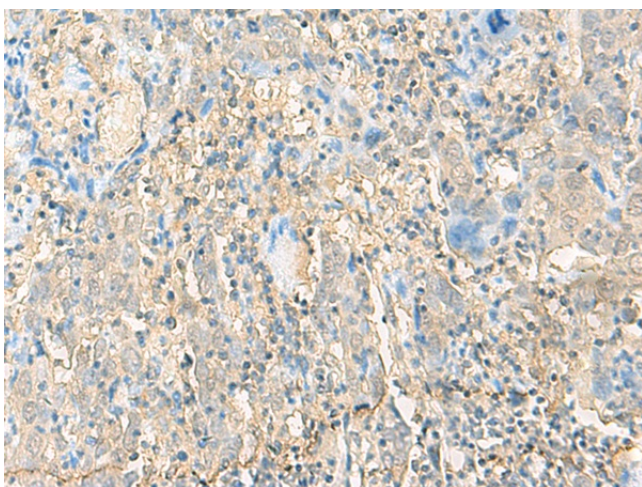|	
Product Type:	Primary Antibodies
Applications:	IHC
Recommended Dilution:	IHC: 25-100 Positive control: Human tonsil Predicted cell location: Cell membrane
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide of human HLA-A/F/H
Formulation:	pH7.4 PBS, 0.05% NaN3, 40% Glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C.
Stability:	1 year
Gene Name:	major histocompatibility complex, class I, H (pseudogene)
Database Link:	Entrez Gene 3136 Human P01893

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Background:

HLA-A 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, exons 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-A alleles have been described. HLA-F belongs to the HLA class I heavy chain paralogues. It encodes a non-classical heavy chain that forms a heterodimer with a beta-2 microglobulin light chain, with the heavy chain anchored in the membrane. Unlike most other HLA heavy chains, this molecule is localized in the endoplasmic reticulum and Golgi apparatus, with a small amount present at the cell surface in some cell types. It contains a divergent peptide-binding groove, and is thought to bind a restricted subset of peptides for immune presentation. This gene exhibits few polymorphisms. Multiple transcript variants encoding different isoforms have been found for this gene. These variants lack a coding exon found in transcripts from other HLA paralogues due to an altered splice acceptor site, resulting in a shorter cytoplasmic domain. HLA-H represents a transcribed pseudogene, possibly derived from HLA-A. This gene displays extensive variation.
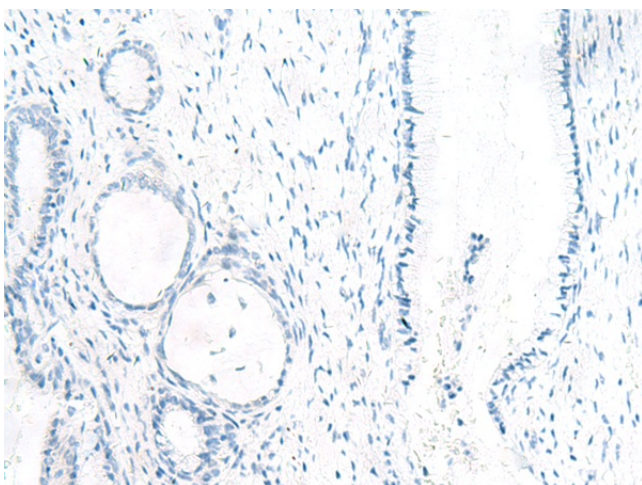
Product images:

Immunohistochemistry of paraffin-embedded Human tonsil tissue using TA368504 (HLA-A/F/H Antibody) at dilution 1/20 (Original magnification: ×200)

Immunohistochemistry of paraffin-embedded Human tonsil tissue using TA368504 (HLA-A/F/H Antibody) at dilution 1/20, treated with synthetic peptide. (Original magnification: ×200)

Immunohistochemistry of paraffin-embedded Human cervical cancer tissue using TA368504 (HLA-A/F/H Antibody) at dilution 1/20 (Original magnification: ×200)

Immunohistochemistry of paraffin-embedded Human cervical cancer tissue using TA368504 (HLA-A/F/H Antibody) at dilution 1/20, treated with synthetic peptide. (Original magnification: ×200)