HLA-A*1101 KRAS G12V Complex Tetramer Protein, Human (HEK293, His-Avi)

Cat. No.:	HY-P77788
Synonyms:	MHC; KRAS; K-Ras 2; KRAS2; C-K-RAS; CFC2; K-RAS2A; K-RAS2B; K-RAS4A; K-RAS4B; KRAS1; KRAS2; NS; NS3; RASK2; GTPase Kras; KI-RAS; RALD
Species:	Human
Source:	HEK293
Accession:	AAV53343 (G25-T305)&P61769 (I21-M119)&VVGAVGVGK
Gene ID:	3105&567
Molecular Weight:	260-265 kDa

PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	N/A.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	HLA-A*1101, an antigen-presenting major histocompatibility complex class I (MHCI) molecule, serves a pivotal role in immune responses by presenting predominantly viral and tumor-derived peptides on antigen-presenting cells. This presentation facilitates the recognition of these peptides by the alpha-beta T cell receptor (TCR) on HLA-A-restricted CD8-positive T cells, guiding antigen-specific T cell immune responses aimed at eliminating infected or transformed cells. In collaboration with B2M/beta 2 microglobulin, HLA-A*1101 displays a diverse peptide repertoire, encompassing viral epitopes and tumor-associated antigens. Both the presented peptide and the MHCI molecule contribute to the specificity of antigen recognition, with the peptide determining fine specificity and MHCI residues influencing the MHC restriction of T cells. HLA-A*1101 typically presents intracellular peptide antigens of 8 to 13 amino acids arising from cytosolic proteolysis. It can bind different peptides containing allele-specific binding motifs, primarily defined by anchor residues at positions 2 and 9. Allele-specific motifs characterize distinct peptide repertoires, such as A*01:01, presenting viral epitopes and tumor antigens with a common canonical motif. Notably, HLA-A*1101 fails to present highly immunogenic peptides from EBV latent antigens. For A*11:01, it plays a crucial role in controlling infections, presenting immunodominant epitopes from HIV-1, EBV, and HBV, along with contributing to the immune response against SARS-CoV-2.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA