HLA-A*1101 KRAS WT Complex Protein, Human (VVVGAGGVGK, HEK293, His-Avi)

Cat. No.:	HY-P700930
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:	AAV53343.1 (G25-T305)&P61769 (I21-M119)&VVVGAGGVGK
Gene ID:	3105&567
Molecular Weight:	52-62 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Normally 8% trehalose is added as protectant before lyophilization.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

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