

Recombinant human HLA-G protein

Catalog Number: ATGP3743

PRODUCT INFORMATION

Expression system

E.coli

Domain

25-308aa

UniProt No.

P17693

NCBI Accession No.

NP_002118.1

Alternative Names

HLA class I histocompatibility antigen, alpha chain G, MHC-G

PRODUCT SPECIFICATION

Molecular Weight

35.3 kDa (309aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 20% glycerol

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

HLA-G, also known as HLA class I histocompatibility antigen, alpha chain G, 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. HLA-G is expressed on fetal derived placental cells. HLA-G is a non-classical class-I HLA molecule associated with anti-inflammatory and immuno-modulatory properties which interacts with inhibitory receptors (ILT2/ILT4/KIR2DL4) present on various immune cells. It inhibits proliferation of B cells, T cells and natural killer cells; and also induces regulatory T cells. Recombinant

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human HLA-G, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGSHM>GSHSM RYFSAAVSRP GRGEPFIAM GYVDDTQFVR FSDSDACPRM
EPRAPWVEQE GPEYWEEETR NTKAHAQTDR MNLQTLRGYY NQSEASSHTL QWMIGCDLGS DGRLLRGYEQ
YAYDGKDYLA LNEDLRSWTA ADTAAQISKR KCEAANVAEQ RRAYLEGTCV EWLHRYLENG KEMLQRADPP KTHVTHHPVF
DYEATLRCWA LGFYPAEIIIL TWQRDGEDQT QDVELVETRP AGDGTQKWA AVVVPSGEEQ RYTCHVQHEG LPEPLMLRWK
QSSLPTIPI

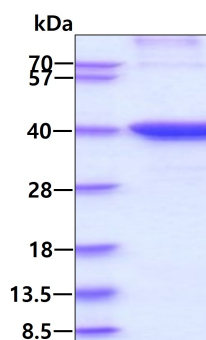
General References

Poomarimuthu M., et al. (2017) *Pediatr Rheumatol Online J.* 15(1):10.

Sanders SK., et al. (1991) *J Exp Med.* 174(3):737-40.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.