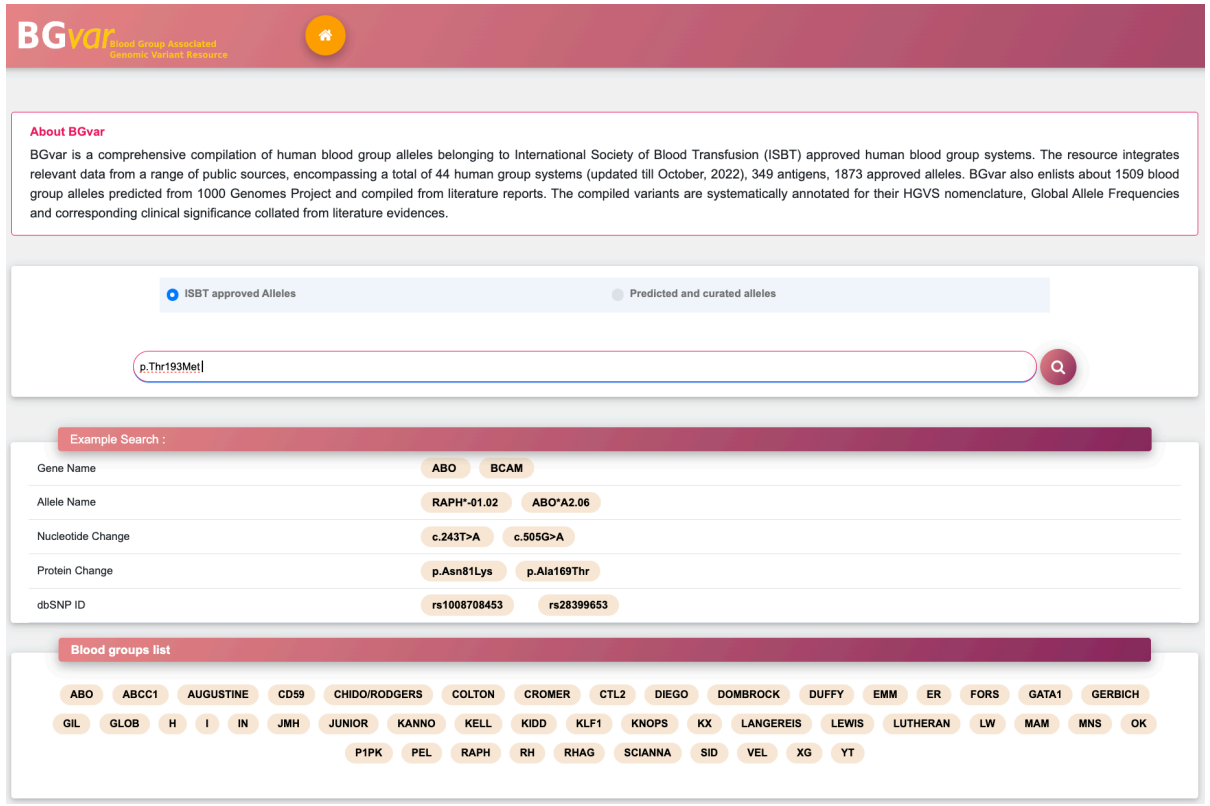
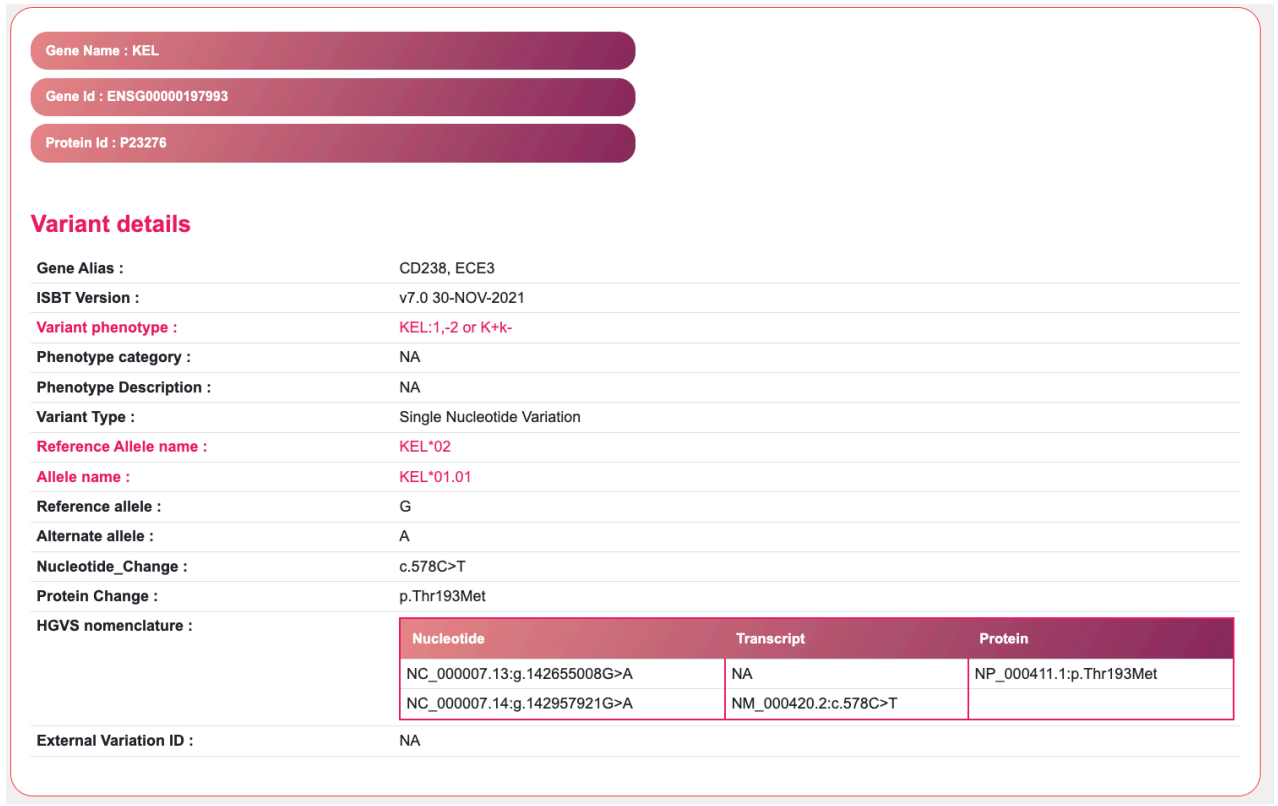
Exercise – 1 : Task 1 Solution





Gene name	KEL
Blood group system	KELL
Blood phenotype	K+k-
Chromosome	7

Genomic position	142655008
Variant type	SNV
Variation ID	NA

Exercise – 2 : Task 2 Solution

Variant Effect Predictor

New job

Species: Homo_sapiens

Assembly: GRCh38.p14

Change species

If you are looking for VEP for Human GRCh37, please go to GRCh37 website.

Name for this job (optional):

Input data:

Either paste data:

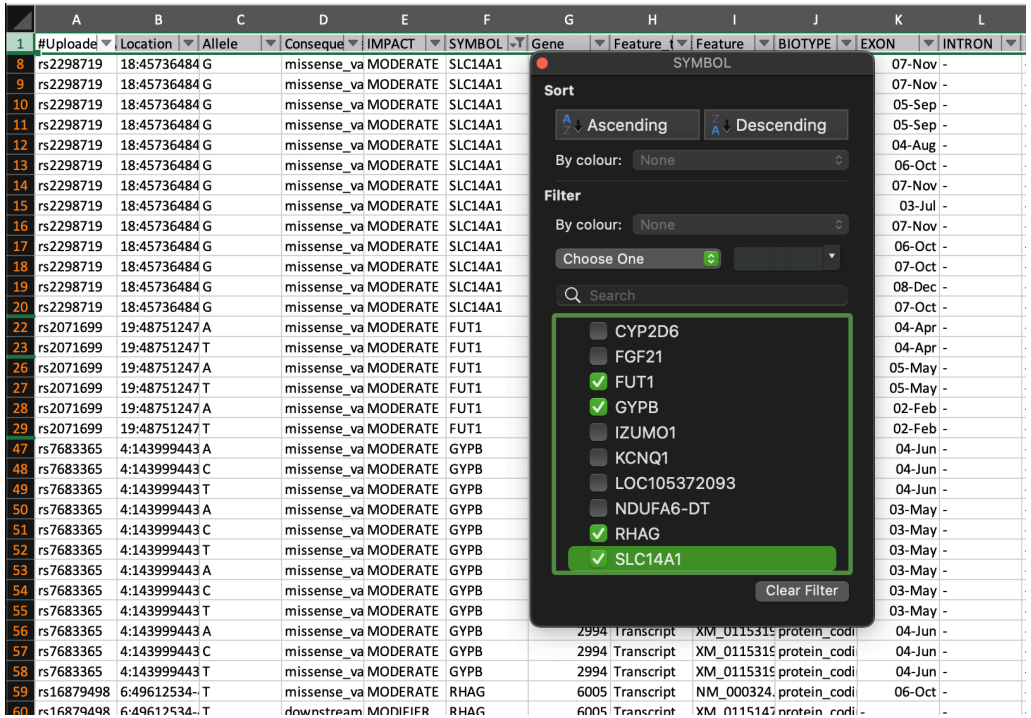
```
rs2071699
rs5030865
rs5030862
rs206069
rs206079
rs144848
rs1057128
```

Run instant VEP for current line ›

Examples: Ensembl default, VCF, Variant identifiers, HGVS notations, SPDI

Or upload file: Choose file No file chosen

Or provide file URL:



Solution – rs2298719, rs2071699, rs7683365 and rs16879498

Exercise – 3 : Task 2 Solution

Variant	Zygosity	Associated Phenotype
Chr17:42328621G>A	Homozygous **(1/1)**	***Di(a+)***

Interpretation Two copies of alternate allele ***(Presence of only alternate antigen)***

Alternate allele name

Proposed genotype **DI*01/DI*01**

Proposed phenotype **Di(a+b-)**

Exercise – 4 : Task 4 Solution

Variant	Chr7:30951658C>T	Chr12:14993439T>C
Zygosity	Heterozygous **(0/1)**	Homozygous **(1/1)**
Associated Phenotype	***Co(b+)***	***Do(b+)***
Interpretation	One reference + One alternate antigen	Two copies of alternate antigen
Proposed genotype	**CO*01/CO*02**	**DO*02/DO*02**
Proposed phenotype	**Co(a+b+)**	**Do(a-b+)**