

**Question 7**Partially  
correctMark 1.50 out  
of 3.00Flag  
question

**Question 7.** How many reviewed (swiss-prot) entries are there for human hemoglobin (including all subunits) at UniProtKB?   9

For how many of these entries are there clear experimental evidences for the existence of the protein?   9

For how many of these entries are there links to the PDB?   7

**Tips:** UniProt accepts incomplete protein names for the search field "protein name".

a) (protein\_name:"hemoglobin") AND (organism\_id:9606) AND (reviewed:true)

but, sequences Q86VB7 (Scavenger receptor cysteine-rich type 1 protein M130) and Q9NZD4 (Alpha-hemoglobin-stabilizing protein) should be excluded. So the search should be:

(protein\_name:"hemoglobin subunit") AND (organism\_id:9606) AND (reviewed:true)

b) (protein\_name:"hemoglobin subunit") AND (organism\_id:9606) AND (reviewed:true) AND (existence:1)

c) (protein\_name:"hemoglobin subunit") AND (organism\_id:9606) AND (reviewed:true) AND (existence:1) AND (structure\_3d:true)