



## General dbSNP Search Options

Created: July 7, 2005; Updated: February 25, 2014.

### Introduction to Searching dbSNP

#### How do I search dbSNP?

As of April 2006, there are 11 ways to directly search dbSNP:

1. **Search by ID**  
Conduct your search using the submitted SNP (ss) or refSNP (rs) Id numbers as your search term.
2. **Search by submitter**  
Conduct your search using the submitter handle, the submitter name or the name of the submitting institution as your search term.
3. **Batch Queries**  
To retrieve a large number of SNPs in a single batch, you conduct your search using submitted SNP ID numbers (ss#), submitter IDs (handle|local\_snp\_id), RefSNP cluster ID numbers (rs#), or Entrez SNP results as your search terms.
4. **Search by batch (New Batches)**  
Conduct your search by selecting an organism, and batch type. Then supply the submission date, submitter handle and submitter batch ID if available.
5. **Search by method**  
Conduct your search using the method type used to identify the SNP as your search term.
6. **Search by population class**  
Conduct your search using population category information as your search term.
7. **Search by population detail**  
Conduct your search using the population handle, the submitter population ID, or the population description as your search term.
8. **Search by publication**  
Conduct your search using the title of the publication, the author names, or the submitter handle as your search term.
9. **Search by locus (gene)**  
conduct your search on Entrez Gene using the gene name or descriptor and the SNP filter: “gene snp” [filter] as your search terms.
10. **Search between Markers**  
Conduct your search using STS markers that map to the same chromosome as your search terms.
11. **Search mouse SNPs between strains**  
Conduct your search by selecting two mouse strains of interest and limiting the search by functional class, by chromosome, or by Entrez SNP search fields.(04/05/06)

## Using the Search Filter Options

**What query do I use to get a list of dbSNP ID numbers that are mapped un-ambiguously on a non-reference assembly only?**

1. Go to Entrez SNP
2. Enter the following query in the search text box located at the top of the page:  
`((all[sb] AND "true"[Not reference assembly]) AND ("homo sapiens"[Organism] AND "1"[Weight]))`  
 (7/5/07)

**Do the "Chromosome Position" record field and the "[CHRPOS]" search filter option start at '0' or '1' as the pTel?**

The minimum start position is 1. The "[CHRPOS]" search filter option will allow you to get all SNPs having position "0" that don't map to a contig or chromosome. The synonym for "Chromosome Position" used in the Preview/Index is "Base Position". (11/30/05)

**What does the [SB] search limit field do?**

The [SB] field limits your search to a subset of records containing links (i.e., Snp\_protein, snp\_nucleotide, etc.).

Aliases=FILT, FLTR, SUBSET, SB, FIL

FullName=Filter

Description=Limits the records

**Could I safely use loc\_cnt=1 to get uniquely mapped SNPs on the "reference" genome?**

No. Use "SNPMapInfo.weight =1 AND SNPMapInfo.ref\_cnt > 0" to count SNPs that align at one physical position and also align on the reference genome.

## Direct Database Queries

**Can dbSNP be queried over the Internet using SQL? I'd like to be able to perform data mining operations. Do you have any plans to introduce internet SQL searching?**

dbSNP can not be queried over the internet using SQL. You could try creating your own local dbSNP using the dbSNP FTP files. There is more information about creating local copies of dbSNP in the [dbSNP handbook](#). (12/18/06)

**Can I query your database server directly?**

The NCBI database group policy forbids outside access to dbSNP.

## Entrez SNP

**Why does the "Common Query Filters" link located on the left blue side bar of the Entrez SNP page lead to the "My NCBI page"?**

The link is correct. My NCBI provides a link to commonly used SNP filters, or allows you to set up custom filters for yourself. You will need to set up an account and sign in to "My NCBI" to access the filter resource. (12/9/05)

## Search using a List of dbSNP ID Numbers

Can you tell me how can I extract information from dbSNP using a list of SNPs from our own computer environment?

You can upload your list of SNPs to the [dbSNP batch query](#) system and get reports in various formats. See also the Batch query section of the dbSNP FAQ Archive (8/7/07)

## bioMart Type Search Function

Does dbSNP offer bioMart service?

[Entrez SNP](#) is the dbSNP version of the bioMart type search function.

Search terms on Entrez SNP can be logically joined using AND, OR and NOT. Here is a simple example:

1. Type "Human[orgn]" (without the quotes) in the textbox at the top of the Entrez SNP page.
2. Click on the "Limits" tab below the text box.
3. Choose the parameters for your search by clicking on the boxes which precede each search parameter.
4. Click the "Go" button located to the right of the text box at the top of the page. (1/12/06)