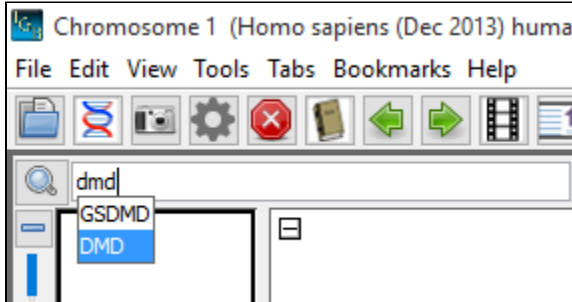


Search

General Function Checklist

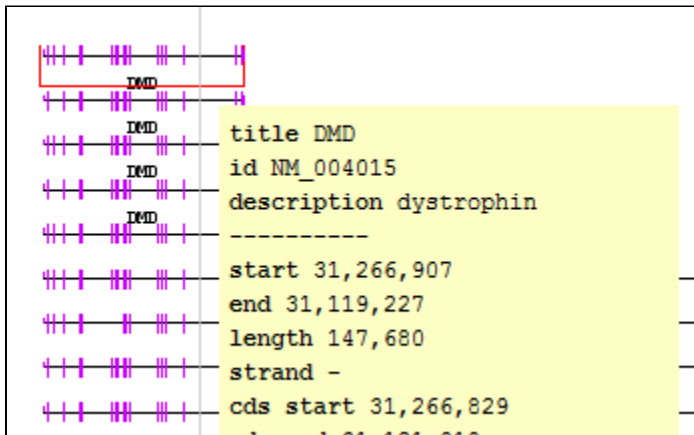
1. Open the **H_sapiens_Dec_2013** genome.
2. Type **dmd** in the Quick-search box.



- **DMD** is one of the suggested matches in the Quick-search drop-down.

- ☐ Mac
- ☐ Linux
- ☐ Windows

Select **DMD** from the Quick-search drop-down to navigate to the longest known gene in the human genome, the *dystrophin* gene (DMD).



- IGB has navigated to the proper gene (*dystrophin*). You can do this by viewing the selection info for the gene. The gene's title should be "DMD".
*(Known issue. See IGBF-2625).

- ☐ Mac
- ☐ Linux
- ☐ Windows

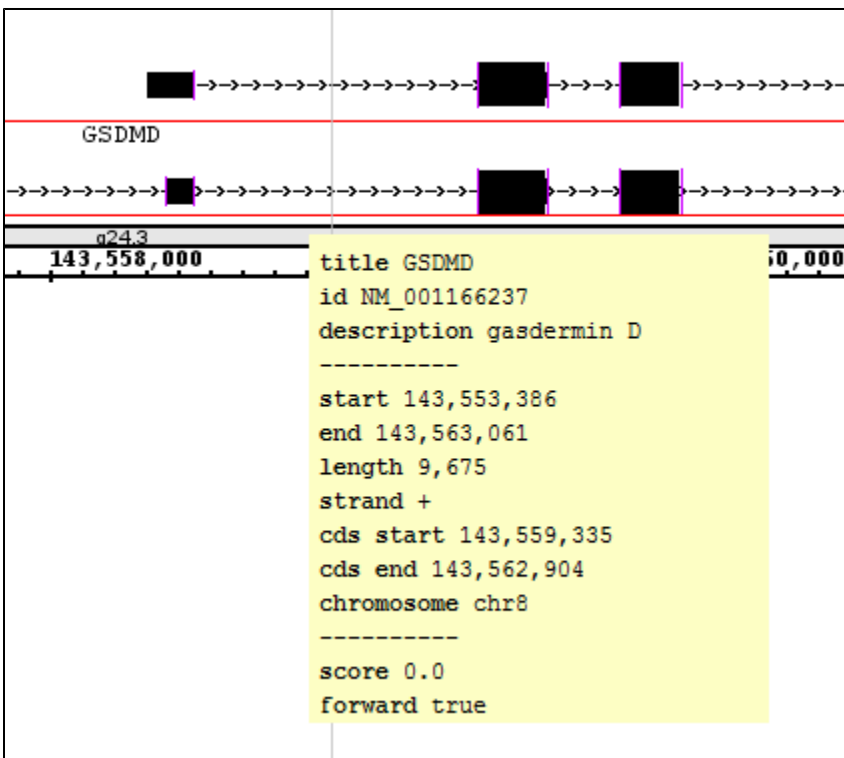
Select the **Advanced Search** tab at the bottom of IGB.

<div> <div>▼</div> <div>Data Access</div> <div>Annotation</div> <div>Graph</div> <div>Advanced Search</div> <div>Selection Info</div> <div>Sliced View</div> <div>External View</div> <div>Plug-ins</div> </div>		
Search for annotations or sequence in H_sapiens_Dec_2013		
Search ID, Name, or Title ▼ in genome ▼ for DMD		
ID	Title	Description
NM_001166237	GSDMD	gasdermin D
NM_001166237	GSDMD	gasdermin D
NM_024736	GSDMD	gasdermin D
NM_024736	GSDMD	gasdermin D
NM_004023	DMD	dystrophin
NM_004022	DMD	dystrophin
NM_004021	DMD	dystrophin
NM_004020	DMD	dystrophin
NM_004019	DMD	dystrophin
NM_004018	DMD	dystrophin
NM_004017	DMD	dystrophin
NM_004016	DMD	dystrophin
NM_004015	DMD	dystrophin
NM_004014	DMD	dystrophin

- Search results for **DMD** are already being displayed in the tab.

- ☐ Mac
- ☐ Linux
- ☐ Windows

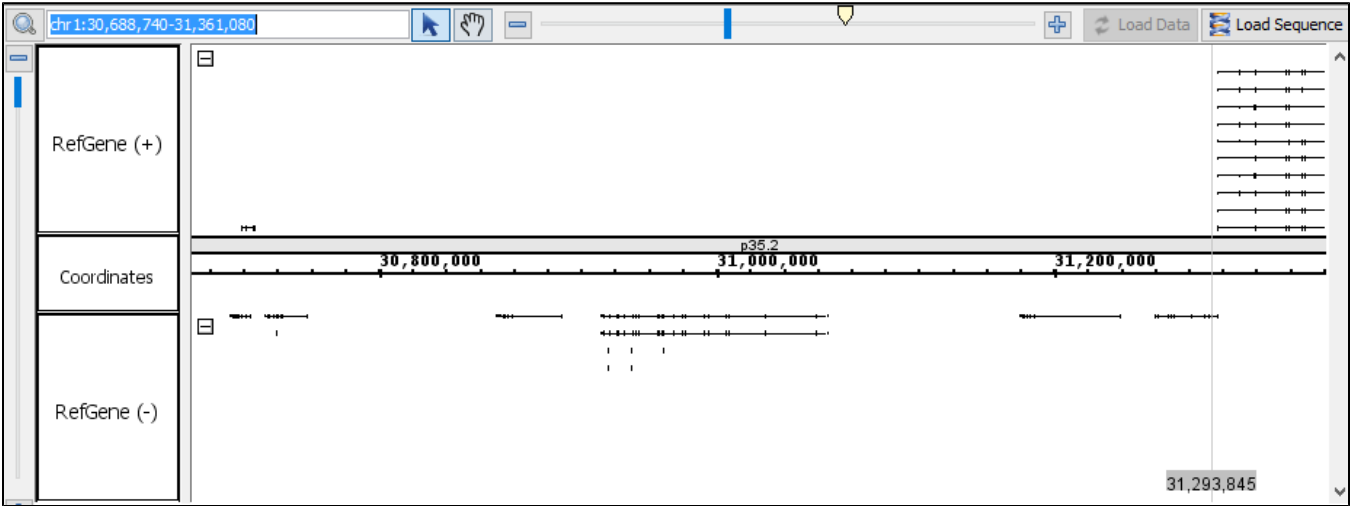
Select the top search result in the Advanced Search tab (ID: **NM_001166237**, Title: **GSDMD**).



- IGB has navigated to **NM_001166237** in the gene **GSDMD**.

- ☐ Mac
- ☐ Linux
- ☐ Windows

Navigate to the following coordinates: chr1:30,688,740-31,361,080



- IGB has navigated to the proper location.

- ☐ Mac
- ☐ Linux
- ☐ Windows

1. In the **Advanced Search** tab at the bottom IGB, select **Residues** from the search type drop-down menu.
2. Enter "TAG|TAA|TGA" into the Advanced Search textbox and start the search.

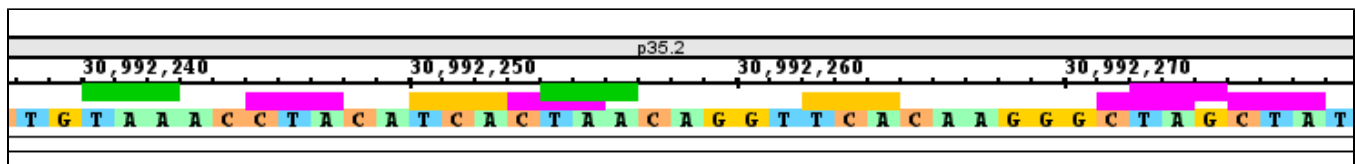
Data Access Annotation Graph Advanced Search Selection Info Sliced View External View Plug-ins						
Search for annotations or sequence in H_sapiens_Dec_2013						
Search Residues in chr1 for TAG TAA TGA						
Pattern	Color	Start	End	Strand	Chr	Matched sequence
TGA		30688754	30688757	+	chr1	tga
TGA		30688761	30688764	-	chr1	tga
TGA		30688766	30688769	-	chr1	tga
TGA		30688791	30688794	-	chr1	tga
TGA		30688809	30688812	-	chr1	tga
TGA		30688818	30688821	+	chr1	tga
TAG		30688822	30688825	+	chr1	tag
TAA		30688831	30688834	-	chr1	taa
TAG		30688857	30688860	-	chr1	tag
TAA		30688858	30688861	+	chr1	taa
TAA		30688872	30688875	-	chr1	taa
TAG		30688873	30688876	+	chr1	tag
TGA		30688882	30688885	+	chr1	tga
TAA		30688887	30688890	-	chr1	taa

TAG : Found 7,103 forward and 7,889 reverse strand hits. TAA : Found 10,223 forward and 9,531 reverse strand hits. TGA : Found 12,492 forward and 12,939 reverse strand hits. Double-click to expand.

- Verify that the search has located matches for "TAG", "TAA", and "TGA".

- ☐ Mac
- ☐ Linux
- ☐ Windows

Navigate to the following coordinates: chr1:30,992,236-30,992,279



- Residues have been highlighted on the sequence axis.

- ☐ Mac
- ☐ Linux
- ☐ Windows

1. Navigate to the following coordinates: **chr1:30,688,740-31,361,080**
2. In the **Advanced Search** tab at the bottom of IGB, select **Residues** from the search type drop-down menu.
3. Enter the following regular expressions (**Note** - clear the search results between each search (click the red X)):
 a. TATATttatg
 b. TATA.ttatg
 c. TATA..tatg
 d. TAT[AT]Tttatg
 e. [TA]{1,3}Tttatg
 f. TATAT*atg
 g. TATAT.*ttatg
 h. TATAT.*?ttatg

- Results show up for each search conducted above.

- ☐ Mac
- ☐ Linux
- ☐ Windows

1. In the **Advanced Search** tab, select **Properties** from the search type drop-down menu.
2. Enter **false** in the search text box.

- There are many results and if you select one (double-click it) and go to the **Selection Info** panel, there is at least one attribute that has the value **false**.

- ☐ Mac
- ☐ Linux
- ☐ Windows

Enter **family** in the search text box.

- There are many results and all include the word **family** in the description. If not, check the selection info panel.

- ☐ Mac
- ☐ Linux
- ☐ Windows