How to use PanelApp

The National Genomic Rare and Inherited Disease Test Directory indicates that gene panels are the appropriate test for many clinical indications. The gene panels signed off for use within the Genomic Medicine Service (GMS) are listed in PanelApp.

PanelApp is a crowdsourcing tool to allow gene panels to be shared, downloaded, viewed and curated by the scientific and clinical community.

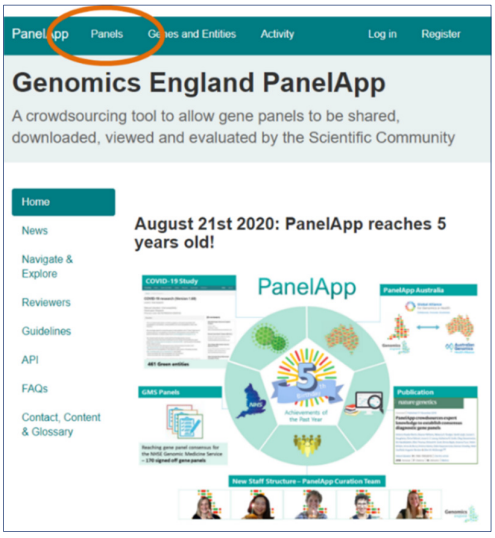
To determine which genes are on the gene panel for a test associated with a clinical indication you can go to the PanelApp website and follow the steps below:

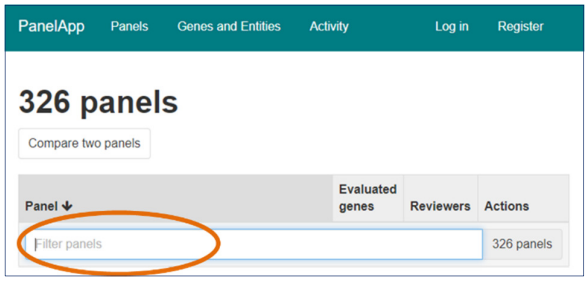
https://panelapp.genomicsengland.co.uk/

Searching for Gene Panels

1) Use the Rare and Inherited Disease Test Directory to identify the clinical indication

2) On the opening web page select Panels in the menu bar at the top of the page

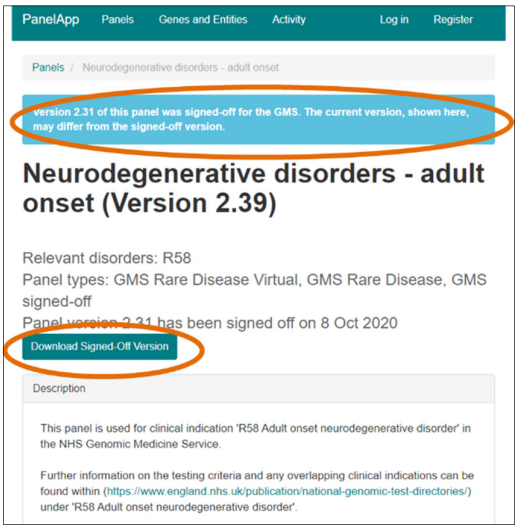


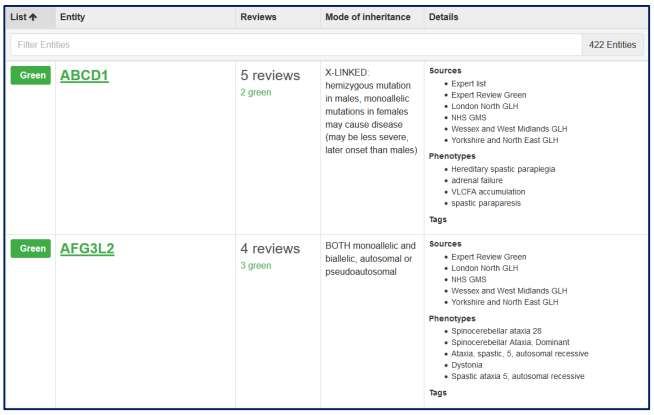


3) Search for clinical indication or R code
or
Search using the term 'GMS' to browse the panels associated with the GMS Test Directory

4) The blue panel indicates that this panel is a GMS Panel associated with the Test Directory

5) Download the GMS signed off version of the gene panel by selecting the green box

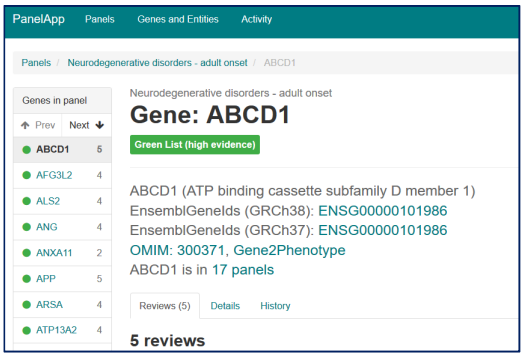




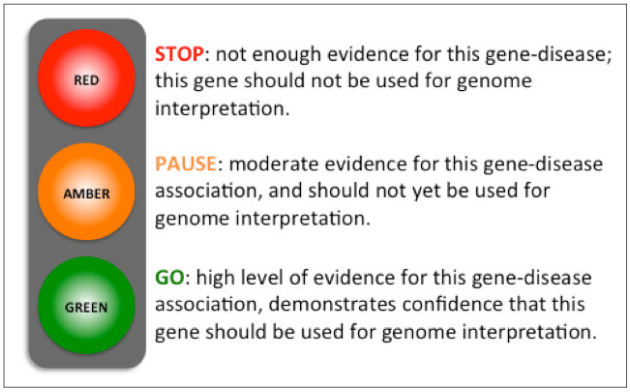
6) Browse all the genes on a panel by scrolling down the page

(but note that this panel version may not be the GMS signed off panel version)

7) Selecting each gene provides additional details and the gene-disease curation evidence



PanelApp Gene Ratings



Genes in panels are classified according to a traffic light system based on the evidence supporting the gene-disease association

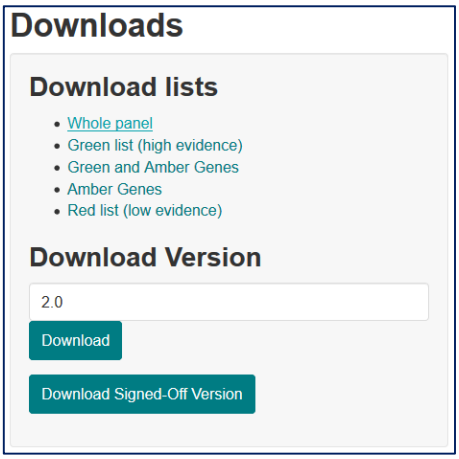
Only Green genes will be analysed and reported for a GMS panel test

Downloading Gene Panels

Download the GMS signed off version of a gene panel by selecting the green box

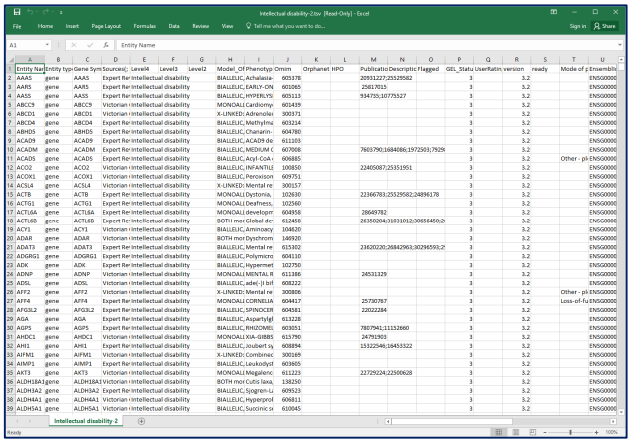
To download a previous version of a panel scroll down to the bottom of the panel webpage

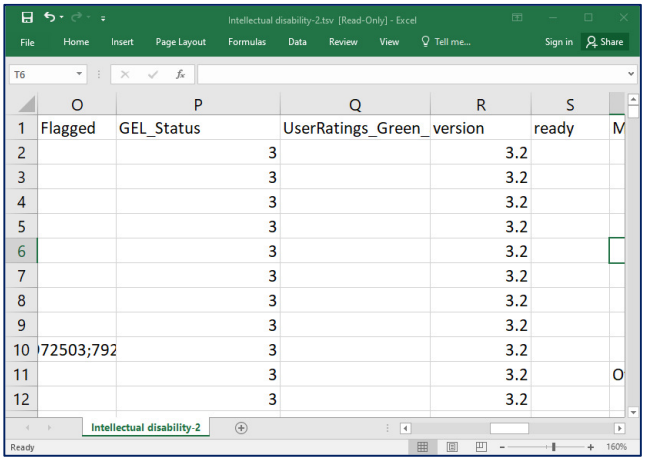
Add the panel version number to the search box – for example “2.0” – and select “Download”



A downloaded gene panel file can be opened in excel

The file contains multiple columns with gene specific information





Useful columns:

Column P - GEL_Status:
3 = Green Gene
2 = Amber Gene
1 = Red Gene

Column R - Version
Version of the downloaded gene panel

Useful web links

National Genomic Rare and Inherited Disease Test Directory:
https://www.england.nhs.uk/publication/national-genomic-test-directories/

PanelApp Website:
https://panelapp.genomicsengland.co.uk/

Become a reviewer to curate PanelApp gene content:
https://panelapp.genomicsengland.co.uk/#!Reviewers