An Introduction to GEDmatch

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GEDmatch, https://www.gedmatch.com/login1.php

Tools for DNA & Genealogy Research

There are 4 main sections of the main page. The very top area is where Alerts and Notices are displayed. GEDmatch tutorials and the logout button are also located here. The middle left section is where GEDmatch account information is located. The middle right has more GEDmatch Information and the analysis tools. The area on the left contains information regarding your account. At the bottom of the main page is information regarding payment options to use the tools in the Tier 1 portion of GEDmatch.

Your Log-in Profile

Contains your name and alias, your email address and your status and if a Tier 1 member, your expiration date, a link to View/Change/Delete your profile and a link to view profile information. It also shows the server IP address. There is also a list of all the kits associated with your GEDmatch account, including phased files and Lazarus files. From here you can also EDIT or DELETE your DNA resource profiles.

In the Middle Right Area

- Information
 - User Lookup Find information on your matches.
 - How to use GEDmatch
 - o GEDmatch Terms of Service
 - GEDmatch info about you
 - GEDmatch Wiki
 - o Useful Videos
 - Support Request
- Upload Your DNA Files
 - Generic Uploads (23andme, FTDNA, AncestryDNA, most others)
 Do NOT open or un-zip raw DNA data files before uploading.
- DNA Applications
 - One-To-Many Beta give it a try
 - o One-To-Many DNA Comparison Result
 - o One-to-One Autosomal DNA Comparison
 - One-to-One X-DNA Comparison
 - Admixture (heritage)
 - o Admixture / Oracle with Population Search
 - People who match both, or 1 of 2 kits
 - DNA File Diagnostic Utility Analyze DNA file upload for potential problems.
 - Are your parents related?
 - o 3-D Chromosome Browser
 - o Archaic DNA matches
 - o Ancestor Projects (Surname, Geographical, Historical Roots)

Tier 1 (This section will be grayed out if not a subscription user.)

- One-To-Many DNA Comparison Beta
- o One-To-Many DNA Comparison
- Q-Matching Enhanced One-To-One
- o Segment Search
- Phasing
- \circ Triangulation
- Multiple Kit Analysis (MKA)
- o Lazarus
- o My Evil Twin
- Combine multiple kits into 1 superkit NEW!
- Clusters, Single Kit input, Basic Version NEW!
- Find common ancestors (MRCA) from DNA matches NEW
- Find surname matches from DNA matches NEW
- Family Trees (also known as GEDCOMs)
 - Upload GEDCOM (Fast)
 - Upload GEDCOM (Alternate), Use this version if Fast does not work.
- Genealogy Comparisons / Searches
 - o 1 GEDCOM to all
 - o 2 GEDCOMs Comparison
 - o Search all GEDCOMs
 - GEDCOM + DNA matches
 - Find GEDCOMs by Kit

Admixture/Oracle with Population Search

This tool allows you to search for a reference population to determine which Admixture Calculation models include that reference population. You might search for "Polish", "Armenia", "China" or "Indian". You are also able to see the complete list of reference populations by leaving the search field blank before clicking the **Find** button.

Once you have selected an Admixture Calculation Model, enter the Kit number, then click the **Continue** button to generate the admixture.

Admixture (Heritage)

1) Select a project from the drop-down menu. The list of choices is shown below. (Eurogenes works well for people of European descent.)

Project List

- MDLP Project
- Eurogenes
- Dodecad
- HarappaWorld
- Ethiohelix
- puntDNAL
- GedrosiaDNA

- 2) Choose the Method to Process Data:
 - Admixture Proportions (With link to Oracle)
 - Admixture Proportions by Chromosome
 - Chromosome Painting
 - Chromosome Painting Reduced Size
 - Paint differences between 2 kits, 1 chromosome
 - Paint differences between 2 kits, 22 chromosomes, reduced size
- 3) On the next screen:
 - Enter your kit number.
 - Select the calculation model to use. (The list of choices for each project is shown below.)
 - Click the **Continue** button to generate results.

Calculation Model

MDLP Project (Global)

- MDLP K11 Modern
- MDLP K16 Modern
- MDLP K23b
- MDLP World-22
- MDLP World

Eurogenes Project (European)

- Eurogenes K13
- Eurogenes EUtest V2 K15
- Eurogenes_ANE K7
- Eurogenes K9b (approx. Geno 2.0)
- Eurogenes K9
- Eurogenes K10
- Eurogenes K11
- Eurogenes K12
- Eurogenes K12b
- Eurogenes K36
- Eurogenes Hunter Gather vs. Farmer
- Jtest
- EUtest

Dodecad Project (Asian/African/European)

- Dodecad V3
- Africa9
- World9
- Dodecad K7b K7b is an update of the eurasia7 calculator. It has been built on exactly the same dataset as K12b but at a lower (K=7) level of detail.
- Dodecad K12b

HarappaWorld Project (South Asian)

• There is no choice.

Ethiohelix Project (African)

- EthioHelix K10 + French French acts as a proxy for European ancestry in this case. Results are currently most meaningful for persons who are a mix of African and European
- EthioHelix K10 + Japanese Japanese acts as a proxy for Asian ancestry in this case. Results are currently most meaningful for persons who are a mix of African and Asian
- EthioHelix K10 + Palestinian Palestinian acts as a proxy for Middle Eastern ancestry in this case Results are currently most meaningful for persons who are a mix of African and Middle Eastern
- EthioHelix K10 Africa Only Results are currently only meaningful for persons who are 100% African

puntDNAL Project (Ancient)

- puntDNAL K10 Ancient
- puntDNAL K12 Ancient
- puntDNAL K12 Modern
- puntDNAL K13 Global
- puntDNAL K15
- puntDNAL K8 African only Results are only meaningful for persons who have 100% African ancestry.

GedrosiaDNA (Eurasian and Ancient)

- Gedrosia K3
- Gedrosia K12
- Ancient Eurasia K6