



MUTATION
Surveyor®
DNA Variant Analysis Software

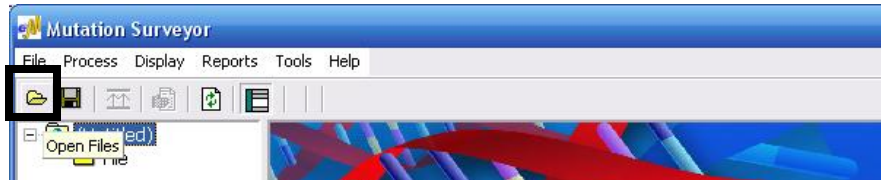
Quick Start Guide

SOFTGENETICS®

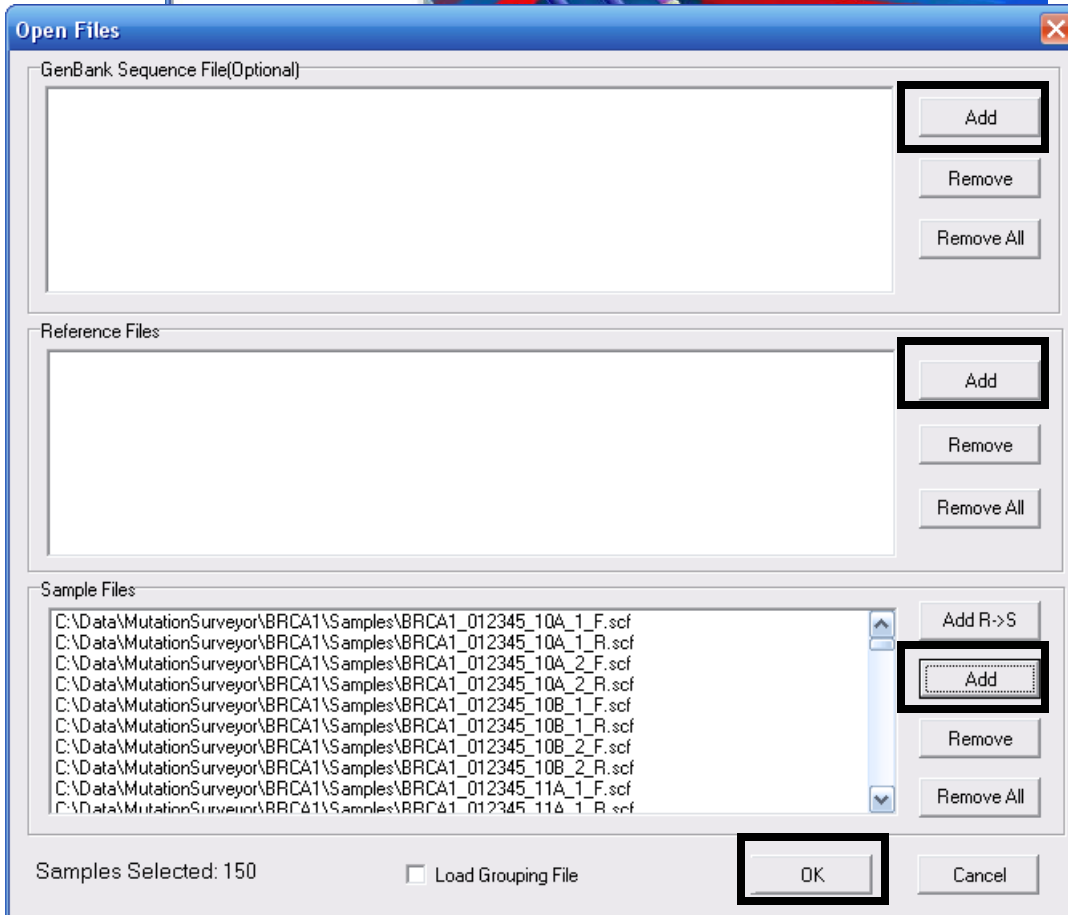
Software PowerTools for Genetic Analysis

www.softgenetics.com / info@softgenetics.com

Upload Data



Click **Open Files** icon in main toolbar



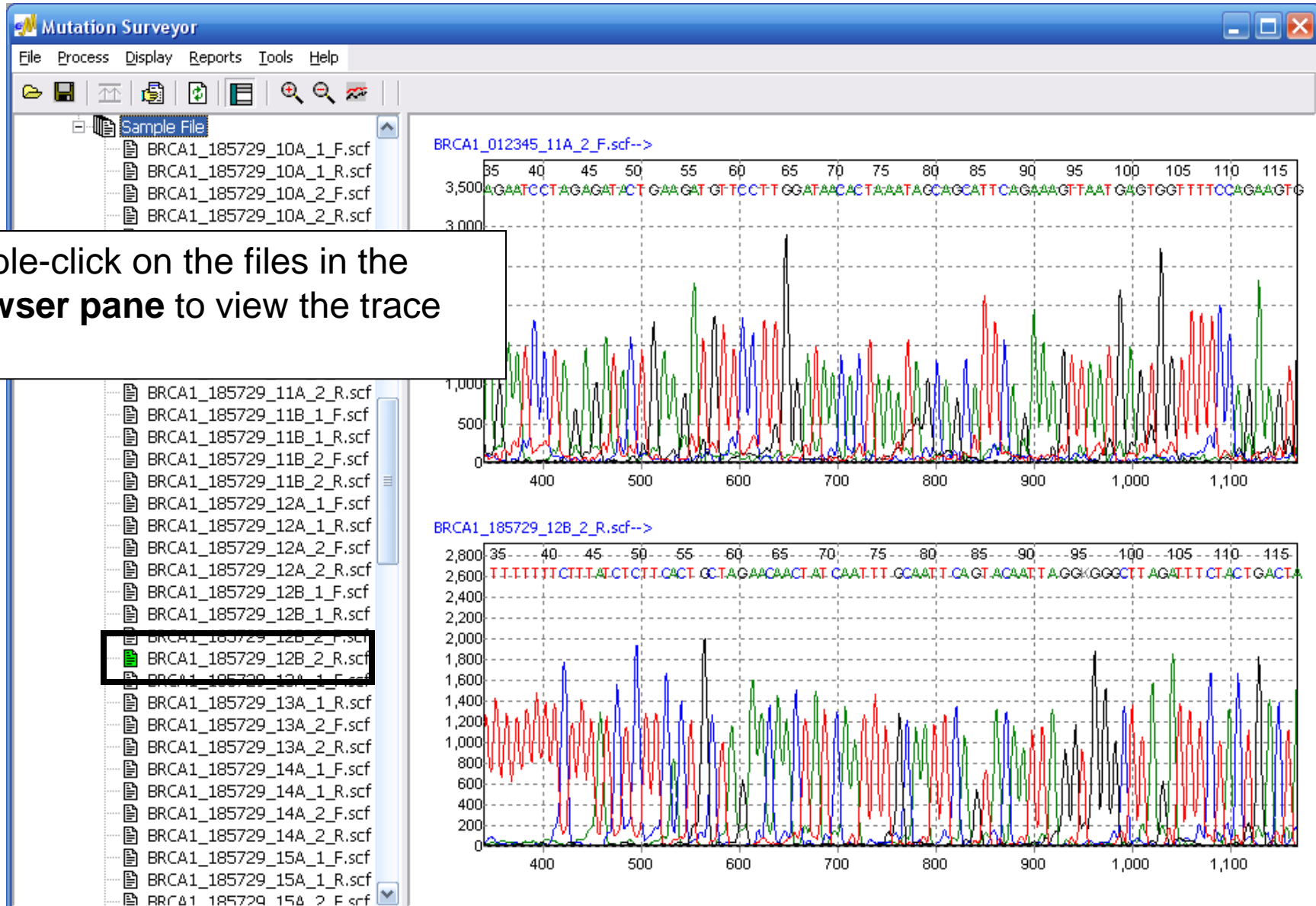
Add GenBank Files (GBK/SEQ)
and/or
Reference Files (SCF/AB1/ABI)

NOTE: Both GenBank and Reference files are optional when sequences map to genes of *Homo sapiens*.

Add Sample Files (SCF/AB1/ABI)

Click **OK**

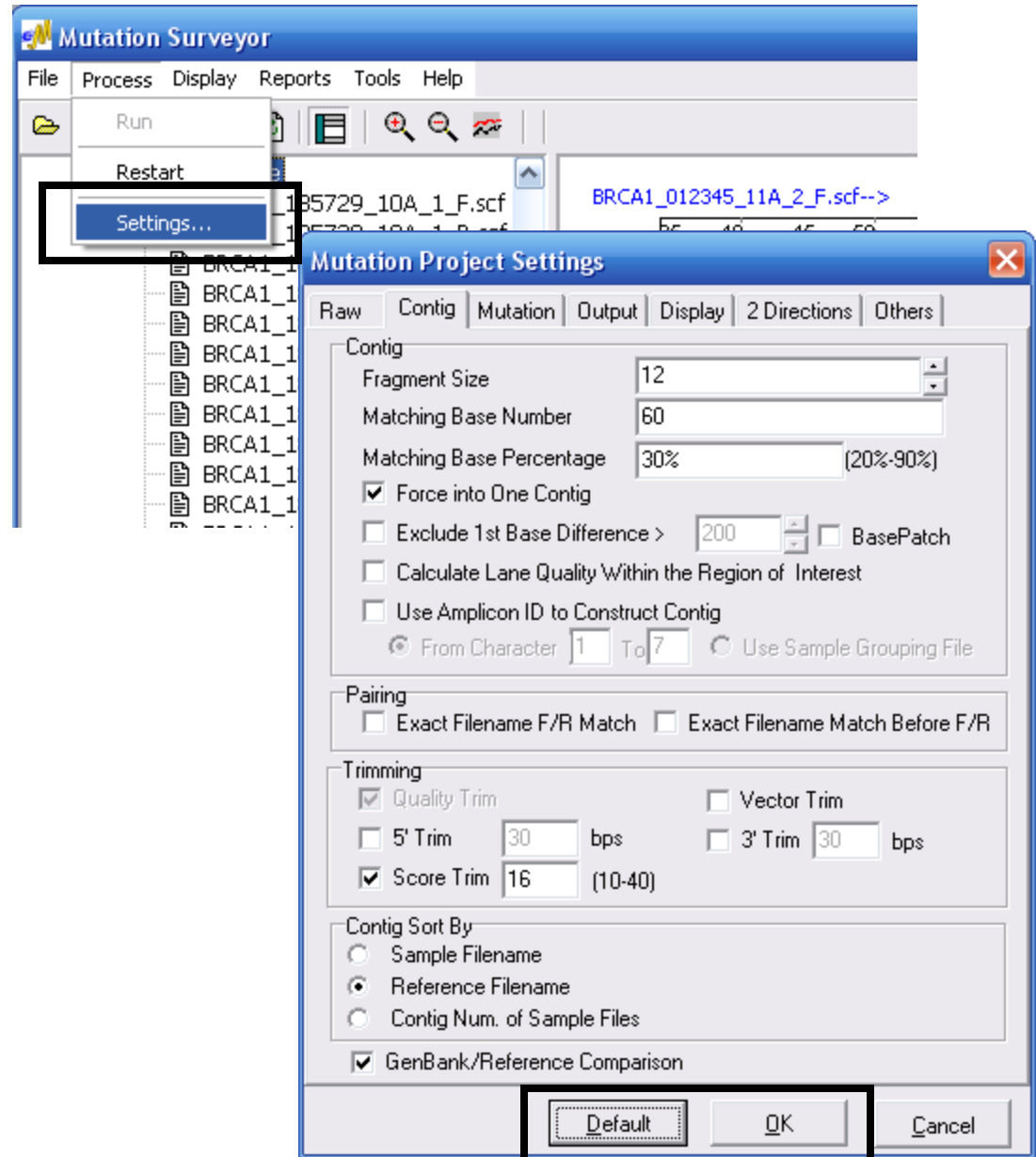
Review Raw Data



Double-click on the files in the Browser pane to view the trace data

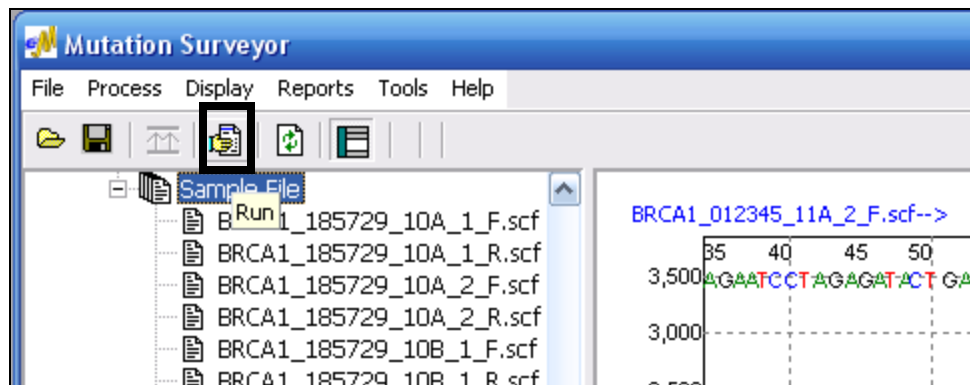
Analysis Settings

In the main toolbar select
Process → **Settings...**



For first run analysis
click **Default** then **OK**

Analyze Your Data!



Click **Run** icon in main toolbar.

You samples will be compared to references

Browser Pane

Mutation Report

The first window to appear is the **Mutation Report**

The screenshot shows the Mutation Surveyor application window with the Mutation Report window open. The report displays a table of mutations. The 'Browser Pane' is visible on the left, and the 'Mutation Report' is the main content. The report table has columns for No., Sample File, Reference File, Dir, Gene, RF, Start, End, Size, Quality, Mut#, and Mutation1. The first 15 rows of the table are shown, with the last three rows (10, 11, and 13) highlighted in red to indicate mutations.

No.	Sample File	Reference File	Dir	Gene	RF	Start	End	Size	Quality	Mut#	Mutation1
1	BRCA1_185729_10A_1_R.scf	BRCA1_012345_10A_1_R.scf	1-R	BRCA1	2	30465	30851	387	28	0	
2	BRCA1_185729_10A_1_R.scf	BRCA1_012345_10A_1_R.scf	1-R	BRCA1	2	30465	30851	387	28	0	
3	BRCA1_185729_10A_2_R.scf	BRCA1_012345_10A_2_R.scf	1-R	BRCA1	2	30758	30856	99	12	0	
4	BRCA1_185729_10A_2_R.scf	BRCA1_012345_10A_2_R.scf	1-R	BRCA1	2	30758	30856	99	12	0	
5	BRCA1_264381_10A_1_R.scf	BRCA1_012345_10A_1_R.scf	1-R	BRCA1	2	30464	30852	389	27	0	
6	BRCA1_264381_10A_1_R.scf	BRCA1_012345_10A_1_R.scf	1-R	BRCA1	2	30464	30852	389	27	0	
7	BRCA1_264381_10A_2_R.scf	BRCA1_012345_10A_2_R.scf	1-R	BRCA1	2	30758	30856	99	11	0	
8	BRCA1_264381_10A_2_R.scf	BRCA1_012345_10A_2_R.scf	1-R	BRCA1	2	30758	30856	99	11	0	
9	Gene1_AmpID_R_S	BRCA1_012345_10A_1_R.scf	1-R	BRCA1	2	30503	30856	354	100	0	
10	BRCA1_185729_10B_1_R.scf	BRCA1_012345_11A_2_F.scf	2-F	BRCA1	2	30973	31043	71	6	1	30988A>AG,356
11	BRCA1_185729_10B_2_R.scf	BRCA1_012345_11A_2_F.scf	2-F	BRCA1	2	30973	31043	71	6	1	30988A>AG,356
12	BRCA1_185729_11A_1_R.scf	BRCA1_012345_11A_2_F.scf	2-F	BRCA1	2	30972	31417	446	11	2	31407CA>C,496
13	BRCA1_185729_11A_2_R.scf	BRCA1_012345_11A_2_F.scf	2-F	BRCA1	2	30972	31417	446	11	2	31407CA>C,496
14	BRCA1_185729_11B_1_R.scf	BRCA1_012345_11A_2_F.scf	2-F	BRCA1	2	31138	31417	280	0	0	
15	BRCA1_185729_11B_2_R.scf	BRCA1_012345_11A_2_F.scf	2-F	BRCA1	2	31138	31417	280	0	0	

Graphical Analysis Display

By double-clicking a mutation cell in the **Mutation Report**, the **Graphical Analysis Display (GAD)** window appears

Forward Reference Trace

Forward Sample Trace

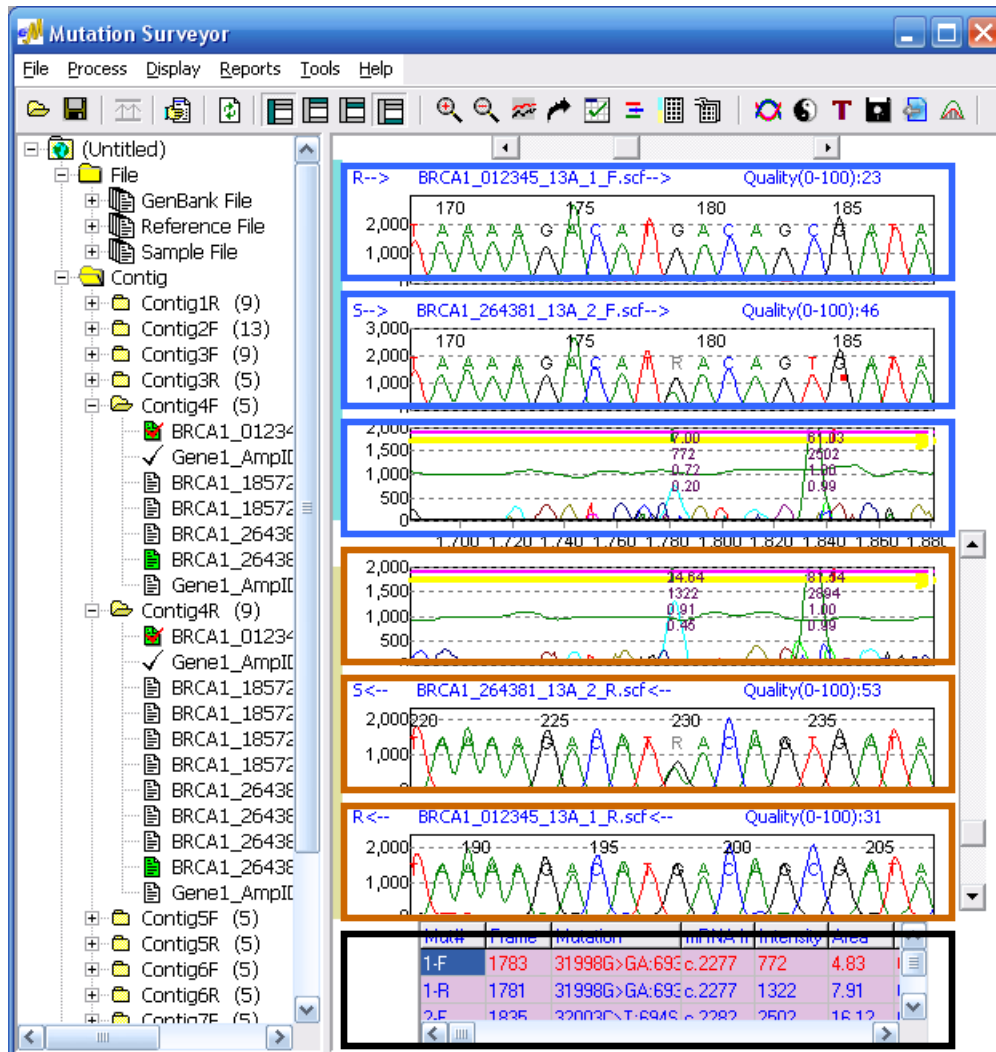
Forward Comparison

Reverse Comparison

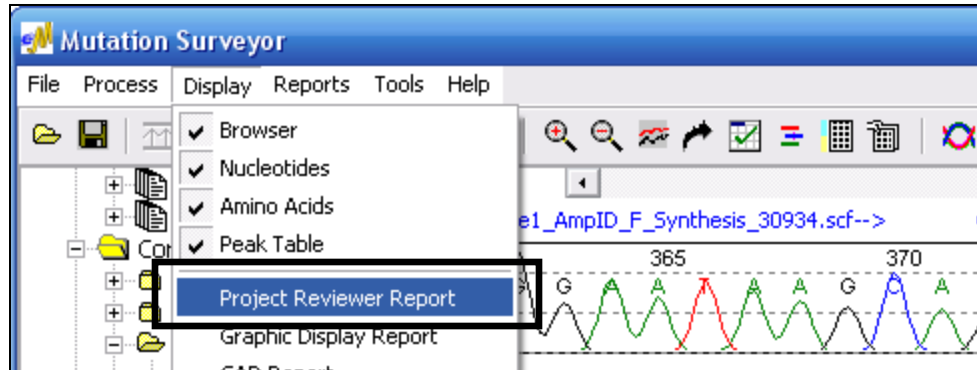
Reverse Sample Trace

Reverse Reference Trace

Mutation Table



Project Reviewer



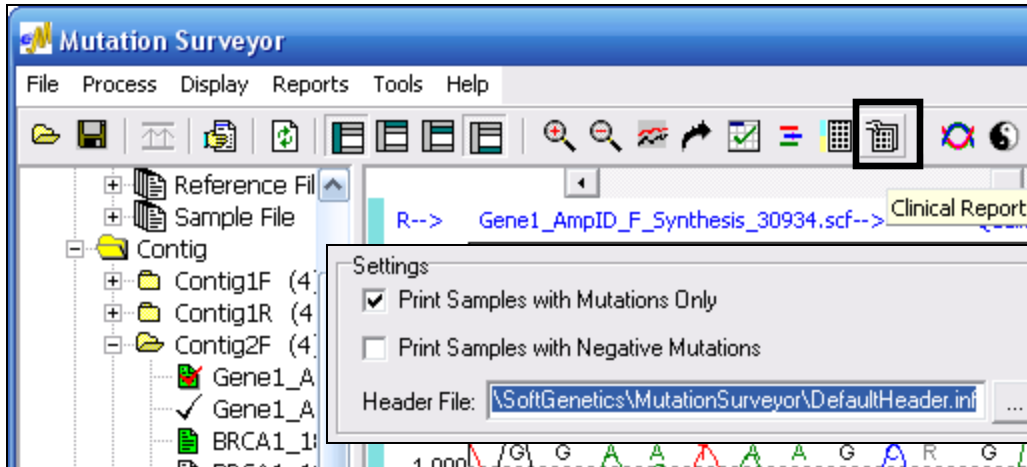
Click **Display** menu in main toolbar and choose **Project Reviewer Report**.

Show All Contigs simultaneously, group traces by Sample ID, view information in many ways.

Legend

Index	Sample Name	Mutation1	Mutation2	Mutation3	Mutation4	Mutation5	Mutation6
13	BRCA1_185729_11B_1_F.scf		31407C>CT,p.R496RC.\$38				
14	BRCA1_185729_11B_1_R.scf		31407C>CT,p.R496RC.\$14				
15	BRCA1_185729_11B_2_F.scf		31407C>CT,p.R496RC.\$38				
16	BRCA1_185729_11B_2_R.scf		31407C>CT,p.R496RC.\$14				

Print Clinical Report



Click **Clinical Report** icon in main toolbar.

Add a Custom **Header File**



View and print a snapshot of each mutation call

