PANEL HEREDITARY RENALCANCER DG-4.0.0 (12 GENES)

| Gene | Twist X2 covered >10x | Twist X2 covered >20x | WGS covered >10x | WGS covered >20x | Associated Phenotype description and OMIM disease ID |
|------|-----------------------|-----------------------|------------------|------------------|---|
| BAP1 | 100.0% | 100.0% | 100.0% | 99.3% | Kury-Isidor syndrome, 619762;Tumor predisposition syndrome 1, 614327;{Uveal melanoma, susceptibility to, 2}, 606661 |
| FH | 100.0% | 100.0% | 100.0% | 98.5% | Leiomyomatosis and renal cell cancer, 150800;Fumarase deficiency, 606812 |
| FLCN | 100.0% | 100.0% | 100.0% | 99.3% | Birt-Hogg-Dube syndrome, 135150;Colorectal cancer, somatic, 114500;Pneumothorax, primary spontaneous, 173600;Renal carcinoma, chromophobe, somatic, 144700 |

| MET | 100.0% | 100.0% | 100.0% | 98.7% | Renal cell carcinoma, papillary, 1, familial and somatic, 605074;?Arthrogryposis, distal, type 11, 620019;Hepatocellular carcinoma, childhood type, somatic, 114550;{Osteofibrous dysplasia, susceptibility to}, 607278;?Deafness, autosomal recessive 97, 616705 |
|--------|--------|--------|--------|-------|---|
| PRDM10 | 100.0% | 100.0% | 100.0% | 99.4% | ?Birt-Hogg-Dube syndrome 2, 620459 |
| PTEN | 94.5% | 94.5% | 99.8% | 93.1% | {Glioma susceptibility 2}, 613028;{Meningioma}, 607174;Cowden syndrome 1, 158350;Lhermitte-Duclos disease, 158350;Prostate cancer, somatic, 176807;Macrocephaly/autis m syndrome, 605309 |
| SDHA | 100.0% | 100.0% | 100.0% | 99.7% | Cardiomyopathy, dilated, 1GG, 613642;Mitochondrial complex II deficiency, nuclear type 1, 252011;Neurodegeneration with ataxia and late-onset optic atrophy, 619259;Pheochromocytoma /paraganglioma syndrome 5, 614165 |

| SDHAF2 | 100.0% | 98.3% | 100.0% | 98.4% | Pheochromocytoma/paraga nglioma syndrome 2, 601650 |
|--------|--------|--------|--------|-------|---|
| SDHB | 100.0% | 100.0% | 100.0% | 98.4% | Pheochromocytoma/paraga nglioma syndrome 4, 115310;Mitochondrial complex II deficiency, nuclear type 4, 619224;Gastrointestinal stromal tumor, 606764;Paraganglioma and gastric stromal sarcoma, 606864 |
| SDHC | 100.0% | 100.0% | 100.0% | 98.5% | Pheochromocytoma/paraga nglioma syndrome 3, 605373;Paraganglioma and gastric stromal sarcoma, 606864;Gastrointestinal stromal tumor, 606764 |
| SDHD | 78.9% | 78.9% | 100.0% | 98.4% | Pheochromocytoma/paraga nglioma syndrome 1, 168000;Paraganglioma and gastric stromal sarcoma, 606864;Mitochondrial complex II deficiency, nuclear type 3, 619167 |
| VHL | 88.0% | 87.9% | 100.0% | 99.3% | Erythrocytosis, familial, 2, 263400;von Hippel-Lindau syndrome, 193300;Renal cell carcinoma, somatic, 144700;Pheochromocytoma , 171300;Hemangioblastoma, cerebellar, somatic, |

Gene symbols used follow HGCN guidelines: Gray KA, Yates B, Seal RL, Wright MW, Bruford EA. Nucleic Acids Res. 2015 Jan 43(Database issue):D1079-85.

TWIST X2 Covered 10x describes the percentage of a gene's coding sequence that is covered at least 10x when analyzed by WES using TWIST X2 chemistry.

TWIST X2 Covered 20x describes the percentage of a gene's coding sequence that is covered at least 20x when analyzed by WES using TWIST X2 chemistry.

srWGS GRCh38 Covered 10x describes the percentage of a gene's coding sequence that is covered at least 10x when analyzed by WGS mapped against GRCh38.

srWGS GRCh38 Covered 20x describes the percentage of a gene's coding sequence that is covered at least 20x when analyzed by WGS mapped against GRCh38.

non-protein coding genes are covered, but as coverage statistics are based on protein coding regions, statistics could not be generated.

OMIM release used for OMIM disease identifiers and descriptions: March 17th, 2023.

This list is accurate for panel version DG 4.0.0

Ad 1. "No OMIM phenotype" signifies a gene without a current OMIM association Ad 2. OMIM phenotype descriptions between {} signify risk factors