



DEPARTMENT OF CLINICAL GENETICS  
SECTION GENOME DIAGNOSTICS (GD)  
**REQUISITION FORM FOR MOLECULAR  
GENETIC TESTING**

The section GD is NEN-EN-ISO 15189:2012 accredited by the Dutch Accreditation Council. The scope for accreditation number M007 can be found at [www.rva.nl](http://www.rva.nl).



Please fully complete the form (one form per person).

Surname and Initials\*  
Name spouse  
Street name and number\*  
Postal code and city\* Country\*  
Date of birth\* (yyyy/mm/dd)  
Sex\*  
**\* REQUIRED FIELDS**

**Patient information / Fill out completely**

**Postal address**  
LUMC, Building 2  
KG, Genome diagnostics S-06-P  
  
Visiting address/ Courier service:  
Einthovenweg 20, 2333 ZC Leiden  
  
Reply number 10392, 2300 WB Leiden  
The Netherlands  
  
**Administration:**  
Tel: +3171-5269800  
Email: [genoomdiagnostiek@lumc.nl](mailto:genoomdiagnostiek@lumc.nl)  
Website: [www.LUMC.nl/klingen](http://www.LUMC.nl/klingen)

**PROCEDURE:**

Always consult us prior to sending material other than blood or DNA. Tel: +31715269800.  
All materials must be clearly labelled with number, name and date of birth of the patient.

**MATERIAL:**

- DNA TESTING: 8-10 ml EDTA blood (neonates ≥ 2.5 ml), DNA (at least 15 µg), tissue, chorionic villi (20 mg) or amniotic fluid (15 ml). Please note for FSHD & Hemophilia 2 tubes EDTA blood.
- RNA TESTING: Use the "RNA ANALYSIS form".

**TRANSPORT:**

EDTA blood and DNA can be sent at room temperature by post to the address above. Use an overnight courier for priority samples and cooled material.

**PATIENT INFORMATION:**

Please give to the patient, this can be found at <https://www.lumc.nl/over-het-lumc/afdelingen/klinischegenetica/aanvraagformulieren/>  
For diagnostic turnaround times, our current criteria for diagnostic requests and opening hours, see our website.

When requesting this genetic test, we assume that the risk of incidental findings was discussed with the patient.

**Objection to other use of remaining material: yes                      no**

**Due to incomplete applications there is a possibility of delay**

REFERRING PHYSICIAN :	Telephone :	
Hospital/Institution :	Department :	
Address :	Your ref. no. :	
Postal code / City :	Email :	
Date of collection :		

**REASON FOR REFERRAL**

- |  |  |
|--|--|
| <input type="radio"/> carrier testing (for recessive diseases only)  | <input type="radio"/> prenatal testing ( <b>only after consultation</b> )    |
| <input type="radio"/> confirmation / exclusion of clinical diagnosis | <input type="radio"/> request for interpretation of variant in index patient |
| <input type="radio"/> predictive / presymptomatic testing            | <input type="radio"/> Only storage, reason:                                  |
| <input type="radio"/> testing for family members                     |  |

**GENE(S) / TEST:** **(see next pages for overview)**

Did you previously send us material from this patient, a family member or spouse?  
 NO                       YES (patient)                       YES (family members, fill in table)

Known mutation: yes: \_\_\_\_\_ LDGA Family number (F-No.): \_\_\_\_\_

**CLINICAL INFORMATION and/or PEDIGREE** (draw pedigree after print or add separately, indicate index with arrow):

Information of tested family members:

No. In pedigree	Name (full)	Date of birth	Sex	Relation to current patient

**TO BE FILLED OUT BY PATIENT SECRETARY:**

Datum ontvangst: \_\_\_\_\_ Paraaf ontvangst: \_\_\_\_\_  
Materiaal en aantal: Bloed / DNA / Vlokken / Vruchtwater/Weefsel      Familienummer: \_\_\_\_\_  
 Alleen formulier

## Gene panels

See next pages for request of individual genes

- Basal cell Carcinoma
- o Breast and ovarium cancer panel
- o Cerebral angiopathies / adult-onset leukoencephalopathies  
(including CADASIL)
- o Coffin-Siris / Nicolaides-Baraitser syndrome
- o Colorectal carcinoma
- o Episodic Ataxia
- o FAMMM (Familial Atypical Multiple Mole-Melanoma)
- o Familial pancreatic carcinoma
- o Short stature, basic gene panel
- o Hereditary Multiple Osteochondromas
- o LYNCH syndrome
- o Lipodystrophy
- o Migraine, familial hemiplegic
- o MODY (Maturity Onset Diabetes of the Young)
- o Muscular dystrophies / myopathies
- o Paragangliomas and/or pheochromocytomas
- o Polyglutamin repeat disorders
- o Polyposis coli, adenomatous\*
- o Polycystic kidney disease
- o Skeletal Muscle Channelopathies

## Alias

- BCC panel**
- HBOC panel**
- CHA panel**
- CSS panel**
- CRC panel**
- EA panel**
- Melanoma panel**
- PACA panel**
- Growth panel**
- HMO panel**
- LYNCH panel**
- LIPO panel**
- FHM panel**
- Diabetes panel/ MODYScan**
- Muscle panel/ MuscleScan**
- PGL panel**
- PolyQ**
- Polyp panel**
- PKD panel**
- Channelopathies**

For an overview of all genes in the gene panels see: <https://www.lumc.nl/over-het-lumc/afdelingen/klinische-genetica/genpanels/>

NB. NGS is performed by GenomeScan B.V.

## Genome analysis

- o Mental retardation or developmental delay, with or without multiple congenital defects
- o Microdeletion syndrome (specify)
- o Growth disorders
- o Carrier detection as a result of CNV finding

## Test

- o CNV analysis (genome wide)
- o CNV analysis (genome wide)
- o CNV analysis (genome wide)
- o CNV analysis (genome wide)

Disorder/Referral	Type	Gene/Test
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### Blood diseases

- |   |        |       |
|---|--------|-------|
| o Hemochromatosis   | Type 1 | o HFE |
| o Hemoglobinopathies / Thalassemia                        |        |       |
| Please use "Requisition form Hemoglobinopathy analysis"   |        |       |
| o Hemophilia ( <i>Please send in 2 tubes EDTA blood</i> ) | Type A | o F8  |
|   | Type B | o F9  |

### Cancer genetics

\*Requests only by a consultant clinical geneticist

- |  |     |   |
|--|-----|---|
| o Breast- and ovarian cancer, hereditary *                             |     | ATM<br>BARD1<br>BRCA1<br>BRCA2<br>BRIP1<br>CHEK2<br>PALB2<br>RAD51C<br>RAD51D   |
| o Clear cell meningioma/ Familial Multiple Meningioma*                 | CCM | o SMARCE1<br>o SMARCB1  |
| o FAMMM (Familial Atypical Multiple Mole-Melanoma)*                    |     | o CDKN2A<br>o CDK4<br>o POT1<br>o BAP1<br>o MITF<br>o SDHA  |
| o Gastrointestinal Stromal Tumors<br>(GIST, Carney-Stratakis syndrome) |     | o CDC73   |
| o Hyperparathyroidism-jaw tumor syndrome (HPT-JT/HRPT2)                |     | o MLH1  |
| o Lynch syndrome (HNPCC)*  | o   | MSH2 (incl. EPCAM)<br>o MSH6<br>o PMS2  |
| o Myeloproliferative diseases (MPDs, somatic mutation)                 |     | o JAK2<br>(p.Val617Phe)<br>o MPN-combi:<br>JAK2 exon 12 &<br>exon 14 p.(Val617Phe),<br>MPL exon 10 and<br>CALR exon 9 |

<b>Disorder/Referral</b>	<b>Type</b>	<b>Gene/Test</b>
o Parangliomas and/or pheochromocytomas		<input type="checkbox"/> MAX
		<input type="checkbox"/> SDHA
		<input type="checkbox"/> SDHAF2
		<input type="checkbox"/> SDHB
		<input type="checkbox"/> SDHC
		<input type="checkbox"/> SDHD
		<input type="checkbox"/> TMEM127
o Polyposis coli, adenomatous*	FAP1	<input type="checkbox"/> APC (incl. GREM1)
	MAP	<input type="checkbox"/> MUTYH
	NAP	<input type="checkbox"/> NTHL1
	PPAP	<input type="checkbox"/> POLD1
	PPAP	<input type="checkbox"/> POLE
	FAP4	<input type="checkbox"/> MSH3
o Renal Cell Carcinoma (RCC), hereditary		<input type="checkbox"/> SDHB
o Rhabdoid tumor predisposition syndrome (RTPS)*	RTPS1	<input type="checkbox"/> SMARCB1
	RTPS2	<input type="checkbox"/> SMARCA4
o Small cell carcinoma of the ovary, hypercalcemic type*	SCCOHT	<input type="checkbox"/> SMARCA4
	SCCOHT	<input type="checkbox"/> SMARCB1
o Schwannomatosis*		<input type="checkbox"/> SMARCB1

### Channelopathies

o Hyperkalemic periodic paralysis (HYPP)		<input type="checkbox"/> SCN4A
o Hypokalemic periodic paralysis (HOKPP)	Type 1	<input type="checkbox"/> CACNA1S
	Type 2	<input type="checkbox"/> SCN4A
o Myotonia congenita (Thomsen, Becker disease)		<input type="checkbox"/> CLCN1
o Myotonia permanens/fluctuans		<input type="checkbox"/> SCN4A
o Paramyotonia congenita		<input type="checkbox"/> SCN4A

### Diabetes

o Hyperproinsulinemia		<input type="checkbox"/> INS
o Insulin dependent diabetes		<input type="checkbox"/> INS
o MIDD (Maternally Inherited Diabetes and Deafness)		<input type="checkbox"/> m.3243A>G tRNALEU/UUR

Disorder/Referral	Type	Gene/Test
o MODY (Maturity Onset Diabetes of the Young)	Type 1	o HNF4A
	Type 2	o GCK
	Type 3	o HNF1A
	Type 4	o PDX1 (IPF1)
	Type 5	o HNF1B
	Type 6	o NEUROD1
	Type 10	o INS
o PNDM (Permanent Neonatal Diabetes Mellitus)		GCK
		o INS
		o KCNJ11
o Persistent hyperinsulinemic hypoglycemia of infancy (PHHI)		o GCK
		o KCNJ11

### Growth and skeletal defects

o Achondroplasia	o FGFR3
o Acromesomelic dysplasia Type Maroteaux	o NPR2
o Hereditary Multiple Osteochondromas	o EXT1
	o EXT2
o NPR2- related tall stature	o NPR2
o Hypochondroplasia	o FGFR3
o Langer mesomelic dysplasia (Leri-Weill dyschondrosteosis)	o SHOX
o Multiple epiphyseal dysplasia	o COMP
o Pseudoachondroplastic dysplasia	o COMP
o Short stature (proportionate)	o GH1
	o GHR
	o GHSR
	o IGF1
	o IGF1R
	o IGFALS
	o STAT5B
o Short stature (osteochondritis dissecans)	o ACAN
o Tall stature	o NPR2
o Thanatophoric dysplasia	o FGFR3
o Van Buchem disease	o VBCH

Disorder/Referral	Type	Gene/Test
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**Immune system**

- |  |        |         |
|--|--------|---------|
| o Chilblain lupus                          | Type 1 | o TREX1 |
| o Granulomatous disease, chronic, X-linked |        | o CYBB  |
| o Lymphoproliferative syndrome, X-linked   |        | o XLP   |
| o Mediterranean fever, familial (FMF)      |        | o MEFV  |
| o Wiskott-Aldrich syndrome                 |        | o WAS   |

**Metabolic diseases**

- |                                  |  |                |
|----------------------------------|--|----------------|
| o Adrenal hypoplasia, congenital |  | o NR0B1 (DAX1) |
| o Cystinuria                     |  | o SLC3A1       |
|                                  |  | o SLC7A9       |

**Muscular dystrophies/ Myopathies**

- |  |         |   |
|--|---------|---|
| Slow-channel congenital myasthenic syndrome-4A (CMS4A)   | Type 4A | CHRNE   |
| Congenital myasthenic syndrome-5 (CMS5)  | Type 5  | COLQ  |
| Congenital myasthenic syndrome-9 (CMS9)<br>associated with AChR deficiency                     | Type 9  | MUSK  |
| Congenital myasthenic syndrome-10 (CMS10)  | Type 10 | DOK7  |
| Congenital myasthenic syndrome-11 (CMS11)<br>associated with acetylcholine receptor deficiency | Type 11 | RAPSN   |
| Congenital myasthenic syndrome-14 (CMS14)  | Type 14 | ALG2  |
| Congenital myasthenic syndrome-15 (CMS15)  | Type 15 | ALG14   |
| Duchenne and Becker  |         | DMD MLPA only<br>DMD Sequencing only<br>DMD MLPA, if<br>negative directly followed by<br>sequencing |
| Emery-Dreifuss (X-linked)  |         | EMD   |
| Facioscapulohumeral (FSHD)<br><i>(Please send in 2 tubes of EDTA blood)</i>                    | Type 1  | Rearrangement chromosome 4<br>Permissive haplotype analysis<br>(4qA/B)                              |
|  | Type 2  | SMCHD1<br>LRIF1<br>DNMT3B   |

Disorder/Referral	Type	Gene/Test
o Limb Girdle	Myofibrillar myopathy	o MYOT
	Emery–Dreifuss muscular dystrophy (EDMD)	o LMNA
	Rippling muscle disease	o CAV3
	LGMD D4 / R1	o CAPN3
	LGMD R2	o DYSF
	LGMD R5	o SGCG
	LGMD R3	o SGCA
	LGMD R4	o SGCB
	LGMD R6	o SGCD
	LGMD R7	o TCAP
	LGMD R8	o TRIM32
	LGMD R9	o FKRP
o Miyoshi (MMD3)	LGMD R12	o ANO5
o Myopathy with extrapyramidal signs		o ANO5
		o MICU1
<b>Neurogenetics</b>		
o Aicardi-Goutières syndrome	Type 1	o TREX1
o Alternating Hemiplegia of Childhood	Type 2	o ATP1A3
o CADASIL		o NOTCH3
o CARASIL/ CADASIL	Type 2	o HTRA1
o Cerebral hemorrhage with amyloidosis (HCHWA-D)		o APP
o Dentatorubral-pallidoluysian atrophy (DRPLA)		o ATN1
o Episodic ataxia	Type 2	o CACNA1A
o Huntington disease		o HTT
o Huntington, disease-like 2 (HDL2)		o JPH3
o Hyperekplexia (familial Startle disease)		o GLRA1
		o GLRB
		o SLC6A5
o Migraine, familial hemiplegic (FHM)		o ATP1A2
		o CACNA1A
		o SCN1A
o Myoclonus dystonia syndrome		o SGCE

<b>Disorder/Referral</b>	<b>Type</b>	<b>Gene/Test</b>
o Neuronal ceroid lipofuscinosis (NCL) Juvenile		o CLN3
	Late infantile	o TPP1 (CLN2)
	Late infantile	o CLN6
	Late infantile	o CLN8
	Late infantile / adult	o PPT1 (CLN1)
o Paroxysmal torticollis		o CACNA1A
• Polyglutamin repeat disorders		o CACNA1A, TBP, ATXN1, ATXN7, ATXN2, ATXN3 and ATN1
o Retinal vasculopathy with cerebral leukodystrophy (RVCL)		o TREX1
<b>Polycystic kidney disease</b>		
o Autosomal dominant Polycystic kidney disease (ADPKD)	Dominant	o PKD1
	Dominant	o PKD2
o Autosomal dominant Polycystic kidney and liver disease (ADPKD)	Dominant	o GANAB
o Autosomal recessive Polycystic kidney (ARPKD)	Recessive	o PKHD1
o Renal cysts and diabetes syndrome (RCAD)	Dominant	o HNF1B
<b>Syndromes</b>		
o Coffin-Siris syndrome		o ARID1A
		o ARID1B
		o SMARCA4
		o SMARCB1
		o SMARCE1
o Ellis van Creveld syndrome		o EVC
		o EVC2
o Filippi syndrome		o CKAP2L
o Marshall-Smith syndrome		o NFIX
o Nicolaides-Baraitser syndrome		o SMARCA2



<b>Disorder/Referral</b>	<b>Type</b>	<b>Gene/Test</b>
o Peters Plus syndrome		o B3GLCT (B3GALTL)
o Pitt-Hopkins syndrome		o TCF4
o Rubinstein - Taybi syndrome		o CREBBP
		o EP300
o Sotos syndrome		o NSD1
o Sotos-like syndrome		o DNMT3A
		o NFIX
		o SETD2
		o HIST1H1E
o TAR (thrombocytopenia-absent radius) syndrome		o 1q21.1 deletion and RBM8A SNP
o Weaver syndrome		o EZH2
<b>Other</b>		
o Hypocalciuric Hypercalcemia, Familial (FHH)		o CASR
		o GNA11
		o AP2S1
o Keratosis follicularis spinulosa decalvans (KFSD)		o MBTPS2
o TSH deficiency and macroorchidism, X-linked		o IGSF1