



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 / Nicolaiides-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)

<u>Disorder/Referral</u>	<u>Type</u>	<u>Gene/Test</u>
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### Blood diseases

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

### Cancer genetics

\*Requests only by a consultant clinical geneticist

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

<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

<b>Disorder/Referral</b>	<b>Type</b>	<b>Gene/Test</b>
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 ACAN
o Short stature (osteochondritis dissecans)	o ACAN
o Tall stature	o NPR2
o Thanatophoric dysplasia	o FGFR3
o Van Buchem disease	o VBCH

<b>Disorder/Referral</b>	<b>Type</b>	<b>Gene/Test</b>
<b>Immune system</b>		
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
<b>Metabolic diseases</b>		
o Adrenal hypoplasia, congenital		o NR0B1 (DAX1)
o Cystinuria		o SLC3A1
		o SLC7A9
<b>Muscular dystrophies/ Myopathies</b>		
Slow-channel congenital myasthenic syndrome-4A (CMS4A)	Type 4A	CHRNE
Congenital myasthenic syndrome-5 (CMS5)	Type 5	COLQ
Congenital myasthenic syndrome-9 (CMS9)	Type 9	MUSK
associated with AChR deficiency		
Congenital myasthenic syndrome-10 (CMS10)	Type 10	DOK7
Congenital myasthenic syndrome-11 (CMS11)	Type 11	RAPSN
associated with acetylcholine receptor deficiency		
Congenital myasthenic syndrome-14 (CMS14)	Type 14	ALG2
Congenital myasthenic syndrome-15 (CMS15)	Type 15	ALG14
Duchenne and Becker		DMD MLPA only
		DMD Sequencing only
		DMD MLPA, if
		negative directly followed by
		sequencing
Emery-Dreifuss (X-linked)		EMD
Facioscapulohumeral (FSHD)	Type 1/2	Rearrangement chromosome 4
<i>(Please send in 2 tubes of EDTA blood)</i>		Permissive haplotype analysis
		(4qA/B)
	Type 2	SMCHD1
		LRIF1
		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>
<input type="checkbox"/> Peters Plus syndrome		<input type="checkbox"/> B3GLCT (B3GALTL)
<input type="checkbox"/> Pitt-Hopkins syndrome		<input type="checkbox"/> TCF4
<input type="checkbox"/> Rubinstein - Taybi syndrome		<input type="checkbox"/> CREBBP
		<input type="checkbox"/> EP300
<input type="checkbox"/> Sotos syndrome		<input type="checkbox"/> NSD1
<input type="checkbox"/> Sotos-like syndrome		<input type="checkbox"/> DNMT3A
		<input type="checkbox"/> NFIX
		<input type="checkbox"/> SETD2
		<input type="checkbox"/> HIST1H1E
<input type="checkbox"/> TAR (thrombocytopenia-absent radius) syndrome		<input type="checkbox"/> 1q21.1 deletion and RBM8A SNP
<input type="checkbox"/> Weaver syndrome		<input type="checkbox"/> EZH2
<b>Other</b>		
<input type="checkbox"/> Hypocalciuric Hypercalcemia, Familial (FHH)		<input type="checkbox"/> CASR
		<input type="checkbox"/> GNA11
		<input type="checkbox"/> AP2S1
<input type="checkbox"/> Keratosis follicularis spinulosa decalvans (KFSD)		<input type="checkbox"/> MBTPS2