

## HK1 REQUEST FORM

*Please provide the following information. We cannot perform your test without ALL of this information. PLEASE PRINT ALL ANSWERS*

### PATIENT INFORMATION\*

Sample Collection Date & Time: \_\_\_\_\_

FIRST NAME \_\_\_\_\_ MI \_\_\_\_\_ LAST NAME \_\_\_\_\_ BIRTH DATE (MM/DD/YYYY) \_\_\_\_\_ GENDER \_\_\_\_\_

**ANCESTRY**     Western/Northern European     Central/Eastern European     Latin American/Caribbean     African  
 Asian     Jewish (Ashkenazi)     American Indian     Near East/Middle Eastern     Native Hawaiian or Pacific Islander

Specify countries: \_\_\_\_\_  Other: \_\_\_\_\_

### CLINICAL INFORMATION

Diazoxide responsive?     Yes     No     Unknown

Results of Surgery:     Focal     Diffuse     Unknown

ICD-10 CODE(S):\*     E16.1    Hyperinsulinism  
 E72.20    Hyperammonemia  
 Z84.89    Family history of condition  
 Other: \_\_\_\_\_

### PARENT INFORMATION

**Mother:** Is sample being submitted?  
 No     Yes, with child's sample     Yes, at a later date  
**Father:** Is sample being submitted?  
 No     Yes, with child's sample     Yes, at a later date

Known consanguinity between mother and father of child?  
 Yes+     No     Unknown  
+Please include Pedigree

**When submitting parental sample, please fill out parent request form**

ADDITIONAL CLINICAL INFORMATION (i..e. GIR, etc) \_\_\_\_\_

*If the test request is for site specific FAMILIAL ANALYSIS for a KNOWN MUTATION:*

Name of person previously tested and relationship: \_\_\_\_\_

Was the previous testing performed at the Genetic Diagnostic Laboratory?     Yes     No

Result (Please include a copy of the result):\* \_\_\_\_\_

### TEST REQUESTED\* [For ALL expedited requests, please call the laboratory prior to sending a sample 215-573-9161]

- Sequence analysis of specific regions of intron 2 in the *HK1* gene
- Site specific analysis (familial) of *HK1* gene (include specific variant above)
- PRENATAL site-specific analysis (familial) of *HK1* gene (include specific variant above)

## PATIENT REGISTRATION FORM

*Please provide the following information. We cannot perform your test without ALL of this information. PLEASE PRINT ALL ANSWERS*

### PATIENT INFORMATION

FIRST NAME \_\_\_\_\_ MI \_\_\_\_\_ LAST NAME \_\_\_\_\_ BIRTH DATE (MM/DD/YYYY) \_\_\_\_\_ GENDER \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_ PHONE \_\_\_\_\_

### PHYSICIAN INFORMATION\*

REFERRING PHYSICIAN \_\_\_\_\_ PHONE \_\_\_\_\_ FAX \_\_\_\_\_

GENETIC COUNSELOR \_\_\_\_\_ PHONE \_\_\_\_\_ FAX \_\_\_\_\_

EMAIL ADDRESS FOR COUNSELOR \_\_\_\_\_ EMAIL ADDRESS FOR PHYSICIAN \_\_\_\_\_

INSTITUTION AND DEPARTMENT \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

### PAYMENT OPTIONS\* (must choose one) [a receipt will be mailed to the patient for self-pay options]

I have enclosed a check payable to the "Genetic Diagnostic Laboratory" for \$ \_\_\_\_\_

Please charge my credit card for the amount of \$ \_\_\_\_\_

VISA     Master Card     Discover     American Express

Card Number: \_\_\_\_\_ Exp date: \_\_\_\_\_

Name of cardholder as it appears on card: \_\_\_\_\_

I have Pennsylvania Medicaid. A copy of my Medicaid card is attached.

INSTITUTIONAL BILLING: The Institution where my testing originated has agreed to pay all charges for the testing.  
INCLUDE Billing Address, Person Authorizing Payment, Telephone, and Fax below:

\_\_\_\_\_  
BILLING ADDRESS

\_\_\_\_\_  
BILLING ADDRESS

NAME OF INDIVIDUAL AUTHORIZING PAYMENT \_\_\_\_\_ PHONE \_\_\_\_\_ FAX \_\_\_\_\_

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## Informed Consent: Genetic Testing for HK1 gene

**Background:** Congenital hyperinsulinism (HI), also referred to as familial hyperinsulinism is the most common cause of frequent episodes of hypoglycemia in infancy. The incidence is estimated to be 1 in 50,000 live births and may be more common in certain populations. Multiple episodes of hypoglycemia increase the risk for complications such as seizures, intellectual disability, vision loss and brain damage. Early medical intervention can help prevent these secondary complications. Increased expression of HK1 protein in pancreatic tissue has been suggested to have a role in the development of HI (PMIDs: 23274908, 37454648).

**Purpose:** The diagnostic samples will be used for the purpose of attempting to determine if I (or my fetus/child) am/is a carrier of an altered gene associated with congenital hyperinsulinism. This information may help establish appropriate medical management.

**Results:** I understand that there are five possible results to this testing:

**PATHOGENIC VARIANT:** A clinically significant variant is detected in gene(s) analyzed. This may explain my personal or family history of HI. My or my child's healthcare provider will make medical management recommendations based on this information.

**LIKELY PATHOGENIC VARIANT:** A variant is detected in the gene(s) analyzed which is the likely deleterious. This may explain my personal or family history of HI. My or my child's healthcare provider will make medical management recommendations based on this information.

**VARIANT OF UNCERTAIN SIGNIFICANCE:** The laboratory may detect an alteration in the gene(s) analyzed which is currently of unknown significance, called a "variant of unknown significance (VUS)". The laboratory will work with my physician to help determine if the VUS can be further classified as to whether it is associated with HI.

**LIKELY BENIGN VARIANT:** A variant is detected the gene(s) analyzed which is not likely to be clinically significant. This result reduces the likelihood that I, or my child, have a clinically significant variant in the gene(s) tested.

**NEGATIVE:** No clinically significant variants were identified in the gene(s) analyzed. This result reduces the likelihood that I, or my child, have a clinically significant variant in the gene(s) tested. Methods currently in use are unable to detect all variants and therefore I may still carry a variant that was not detected by the current technology.

**Disclosure Policy:** The Genetic Diagnostic Laboratory will release my test results to the ordering healthcare provider or genetic counselor, and otherwise only as permitted by law. The results will be kept confidential to the extent allowed by law. If I provide separate written consent, the lab will release my test results to other medical professionals or third persons I want to receive my results.

**Limitations:** While genetic testing is highly accurate for detection of the majority of disease causing mutations, a small fraction of mutations may be missed by the current technology. Due to the nature of the testing, there is a small possibility that the test will not work properly or that an error will occur. Occasionally, testing may reveal a variant of unknown significance that is unable to be definitively interpreted as positive or negative for disease-association based on the current knowledge of the variant. The DNA analysis performed at the University of Pennsylvania Genetic Diagnostic Laboratory is specific only for gene(s) analyzed and in no way guarantees my health.

There are federal laws in place that prohibit health insurers and employers from discriminating based on genetic information, such as test results. There currently are no federal laws prohibiting discrimination based on genetic information by life insurance, long term care, or disability insurance companies, but state laws may restrict this. I understand I can ask my ordering provider or genetic counselor for more information about how insurers might use genetic information.

Initials \_\_\_\_\_

**Use of Specimens After Clinical Test Performed:** I understand my blood or tissue specimen will not be returned to me or the ordering healthcare provider, and becomes the property of the lab upon receipt. The laboratory is not a DNA banking facility; therefore this is no guarantee that samples will be available or usable for additional or future testing. Samples from New York residents will be disposed of 60 days after clinical testing is complete.

After the laboratory completes the ordered clinical test, the lab may retain and preserve the specimen to validate the development of future genetic tests or for future research or education purposes. The laboratory is committed to continuous improvement and therefore I understand my coded sample may be used to validate a new assay. If testing reveals a clinically significant result during the validation process of a new assay related to the original indication for testing, my health provider may be contacted. If the lab uses the specimen for future research or education purposes, the specimen will be de-identified by removing my personally identifying information. My name, address and other personal identifying information will not be linked to the samples, or the results of the research, and I will not be identified in any research results or publications. I will not receive a copy of the research results. I can decline for my sample to be retained at the lab by filling out "Research Opt Out" form found on the following website: <http://www.med.upenn.edu/genetics/gdl/>.

I understand the lab may wish to contact me, or my ordering healthcare provider, for additional information. The additional information may include, but would not be limited to, information about health and family history that might be relevant to the research. I understand I can decline future contact from the lab by filling out "Research Opt Out" form found on the following website: <http://www.med.upenn.edu/genetics/gdl/>.

**Genetic Counseling** provided by a qualified specialist (i.e. genetic counselor/ medical geneticist) is a recommendation for individuals proceeding with genetic testing. This service is available before and after genetic testing. Additionally, other testing or further physician consults may be warranted.

The Genetic Diagnostic Laboratory is also an available resource to ask more questions about this testing. The laboratory genetic counselor can be reached at 215-573-9161 and Arupa Ganguly, PhD, FACMG can be reached at 215-898-3122. I will be given a copy of this consent form to keep.

**HEALTHCARE PROVIDER STATEMENT:**

I have explained to \_\_\_\_\_ the purpose of this genetic testing, the procedures required and the possible risks and benefits to the best of my ability.

\_\_\_\_\_  
Printed Name of Professional Obtaining Consent

\_\_\_\_\_  
Signature of Professional Obtaining Consent

\_\_\_\_\_  
Date

**CONSENT OF PATIENT:**

I have read and received a copy of this consent form. I agree to have genetic testing performed for myself, child or my fetus, and accept the risks. I understand the information provided in this document and I have had the opportunity to ask questions I have about the testing, the procedure, the associated risks and the alternatives.

Patient's Printed Name: \_\_\_\_\_

DOB: \_\_\_\_\_

Patient's Signature: \_\_\_\_\_  
(or Parent/Guardian if patient is a minor)

Date: \_\_\_\_\_

Name and Relationship: \_\_\_\_\_  
(Parent/Guardian if patient is a minor)

Initials \_\_\_\_\_