

PATIENT INFORMATION

First name : **Last name :** **Date of birth :**/...../.....
Ethnicity : **Sex :** ☐ Male ☐ Female **ID/Passport No.:**
Hospital number(HN): **Phone :** **E-mail :**
Clinical information : **Recent blood transfusion(< 3 months) :** ☐ yes ☐ no
Spouse : Name **Last Name** **Date of birth :**/...../.....
Information of requestor doctor : Doctor's name **Doctor's phone :**
Doctor's E-mail : **Hospital/clinic :** **Signature :**

Specimen information

Collection date :/...../..... Time: : AM/PM

Specimen Type:

☐ EDTA ☐ Buccal swab ☐ Amniotic Fluid☐ Other (specify).....

☐ ผู้ส่งตรวจยืนยันว่าผู้รับการตรวจ/คนไข้ให้ความยินยอมในการตรวจดังกล่าวจริง (The patient has provided consent for this testing)

Signature:

To be completed by Registration officer

Receive Date :/...../..... Time : AM/PM

Signature:

To be completed by LAB personnel

Receive Date :/...../..... Time : AM/PM

Signature:

Payment : ☐ Cash ☐ Credit ☐ Other (specify).....

THALASSEMIA DIAGNOSIS PACKAGE

☐ **Basic package**

- CBC
- Hb typing (CE)
- PCR for SEA-THAI

☐ **Comprehensive Package**

- CBC
- Hb typing (CE)
- PCR for α -globin deletion set
- PCR for α -globin non-deletion set

☐ **Premium package**

- CBC
- Hb typing (CE)
- PCR for α -globin deletion set
- PCR for α -globin non-deletion set
- Advanced β -globin ARMS-PCR
- β -globin deletion set
- α -globin triplication-set (3.7/4.2 type)

☐ **Complete diagnosis package**

- CBC
- Hb typing (CE)
- PCR for α -globin deletion set
- PCR for α -globin non-deletion set
- Advanced β -globin ARMS-PCR
- β -globin deletion set
- α -globin triplication-set (3.7/4.2 type)
- Sequencing whole β -globin genes
- Sequencing whole α -globin genes

INDIVIDUAL TEST FOR THALASSEMIA / HEMOGLOBINOPATHY DIAGNOSIS

Basic test

- ☐ CBC ☐ Hb typing (CE)
- ☐ NB Screening CE for thalassemia

Special test

- ☐ *XmnI* SNP
- ☐ α -globin triplication set (3.7/4.2 type)
- ☐ Hb E diagnosis by RFLP

Testing for β -globin gene

- ☐ Basic β -globin ARMS (10 mutations)
- ☐ Advanced β -globin ARMS (16 mutations)
- ☐ Advanced β -globin ARMS (25 mutations)
- ☐ Sequencing whole β -globin genes
- ☐ Advanced β -globin ARMS (32 mutations)
- ☐ β -globin deletion set (10 deletions)

Testing for other globin genes

- ☐ ε -globin sequencing
- ☐ γ -globin sequencing
- ☐ δ -globin sequencing

Testing α -globin gene

- ☐ PCR for SEA deletion
- ☐ PCR for SEA and THAI deletions
- ☐ PCR for 3.7+4.2 deletions
- ☐ α -globin ARMS for Hb CS+Hb PS
- ☐ PCR for α -globin deletion set (8 deletions)
- ☐ PCR for α -globin non-deletion set (6 mutations)
- ☐ Combo-set (8 deletions + 6 mutations)
- ☐ Sequencing whole α -globin genes
- ☐ PCR for common α -thal1 and α -thal2 genes

☐ PND testing for α -thalassemia☐ PND testing for β -thalassemia**Couple at risk for :** (You can choose more than one option)☐ β -thal major ☐ β -thal/Hb E ☐ Hb Bart's hydrops ☐ Severe Hb H disease**Results from thalassemia screening :** an official report must be included **GA :** weeks

Mother Name : Father Name :

 α -globin genotype : α -globin genotype : β -globin genotype : β -globin genotype :

Hb typing result :

Hb typing result :

☐ ตรวจ VNTR marker เพื่อหาการปนเปื้อน DNA ของแม่

*This test requires cord blood sample from fetus in an EDTA tube together with peripheral maternal blood sample (6 ml-EDTA).

We will perform molecular testings based on reports of pre-prenatal screening and determine maternal contamination by Capillary electrophoresis and/or VNTR markers, GA: gestational age.

HUMAN MOLECULAR GENETICS

Cancer risk factor

- ☐ BRCA 1 and BRCA 2 Genes Comprehensive Screening for Breast and Ovarian Cancer
- ☐ Advanced 146 germline cancer genes screening
- ☐ 52 genes Somatic Cancer Screening (Liquid biopsy)

Genetic risk factors

- ☐ Vitamin D receptor (PCR-RFLP)
- ☐ APOE polymorphism
- ☐ Hyperuricemia (HPRT1)
- ☐ MTHFR (PCR-RFLP)
- ☐ TNF (PCR-RFLP)
- ☐ MLH1 gene testing (PCR-RFLP)

Exome analysis

- ☐ Whole Exome Sequencing (WES) Trio
- ☐ Whole Exome Sequencing (WES)

Immunodeficiency panel

- ☐ WASP (Wiskott-Aldrich syndrome) (sequencing)
- ☐ PGAL4, ST3GAL4 (seq+nested-PCR)
- ☐ TNF- α for sepsis risk (RFLP)
- ☐ Mx1 (Myxovirus Resistance 1) (sequencing)

Metabolic disease

- ☐ LAL (Wolman disease) (sequencing)
- ☐ GDC (Glutaryl CoA dehydrogenase) (sequencing)
- ☐ MSUD/BCKDHA (sequencing)
- ☐ MSUD/BCKDHB (sequencing)

Newborn screening

- ☐ NB-1: Newborn screening for Organic acid disorders (40 diseases) + Congenital Hypothyroidism (CH)
- ☐ NB-2: NB-1 + Thalassemia Screening

Infectious

- ☐ HPV DNA Testing
- ☐ Mycoplasma DNA
- ☐ Parvovirus B19 DNA
- ☐ COVID-19 screening test (ATK)
- ☐ COVID-19 qRT-PCR

Basic screening

- ☐ Clinical chemistry
- ☐ Liver Function test: AST/ALT/TB/DB/GGT/ALB/GLB
- ☐ Renal function test: BUN/Cr/GFR
- ☐ Serum ferritin
- ☐ Electrolyte: Na/K/Cl/HCO₃
- ☐ Ca/Mg/P
- ☐ Iron study: TIBC/SI/Tsat

Stem cells testing

- ☐ CD 34+ enumeration
- ☐ Mesenchymal stem cells(MSCs) testing (CD90, CD73, CD105, CD34, CD45, HLA-DR)

Hematopathology panel

- ☐ MPD/JAK2 (V617F) (RFLP)
- ☐ MPD/JAK2 (Exon-12 sequencing)
- ☐ BCL11A/HBS1L-MYB (SNPs) (RFLP)
- ☐ AE-1 (G701D, SAO, F83L) (RFLP)
- ☐ AE-1 (sequencing)
- ☐ KLF-1 (Kruppel-Like Factor 1) common variants
- ☐ KLF-1 (Kruppel-Like Factor 1) gene sequencing
- ☐ KLF-1 (Kruppel-Like Factor 3) gene sequencing
- ☐ SOX6 (sequencing)
- ☐ ASHP (sequencing)
- ☐ DKC common variants (sequencing)
- ☐ Epo-receptor (sequencing)
- ☐ VHL (exon 1-3: sequencing)
- ☐ DBA/RPS19 (sequencing)
- ☐ DBA/RPS24 (sequencing)
- ☐ α -Spectrin panel
- ☐ β -Spentrin panel

Pharmacogenetics

- ☐ UGT1A1 (PCR-RFLP+seq)
- ☐ Warfarin / VKORC-1 (PCR-RFLP)
- ☐ Warfarin / CYP2-C9 (PCR-RFLP)
- ☐ Clopidogrel / CYP2-C19 (PCR-RFLP)
- ☐ Carbamazepine, Phenytoin, Phenobarbital / HLA-B*57:02
- ☐ Allopurinol / HLA-B 5801(Nested-PCR)
- ☐ Statin/SLCO1B1 (AS-PCR)
- ☐ TMPT variants (ARMS-PCR+PCR-RFLP)
- ☐ TMPT (sequencing)
- ☐ Pharmacogenetics package

Anti-aging

- ☐ Vitamin D level
- ☐ Anti-aging Program **MALE**: CBC, HbA1c, Telomere Length, Growth hormone, DHEA-S, Liver function test, Blood urea nitrogen (BUN), Creatinine, Testosterone
- ☐ Anti-aging Program **FEMALE**: CBC, HbA1c, Telomere Length, Growth hormone, DHEA-S, Liver function test, Blood urea nitrogen (BUN), Creatinine, Estrogen, Progesterone
- ☐ Telomere Length Measurement

RBC enzymes

- ☐ G-6-PD common variants (RFLP+ARMS)
- ☐ G-6-PD (sequencing)
- ☐ PKLR variants (RFLP+ARMS)
- ☐ PKLR (sequencing)
- ☐ BCAM (sequencing)

Gaucher Screening

- ☐ Gaucher Disease screening (Enzyme activity testing)
- ☐ Gaucher Disease confirmation (Enzyme activity measurement and PCR-RFLP for common variants)
- ☐ Gaucher Disease confirmation (sequencing)

Perinatal health

- ☐ DNA barcoding (STR marker identification)
- ☐ Paternity testing
- ☐ Sex determination (SRY)
- ☐ Pre-PGD diagnosis for
- ☐ Pre-PGD test with HLA haplotype
- ☐ PGD diagnosis for
- ☐ PGD test with HLA haplotype
- ☐ PGS by Next generation sequencing (NGS)
- ☐ Tailor-made genetic testing.....
- ☐ Universal Genetic Test Panel for Pre-marriage and Pre-pregnancy

Coagulation

- ☐ Factor V-Leiden/Hong Kong (RFLP)
- ☐ Fator II / prothrombin / 202102A
- ☐ Anti-thrombin-Siriraj (RFLP)
- ☐ Anti-thrombin (sequencing)
- ☐ FGA (fibrinogen α -chain) (sequencing)
- ☐ Package-Screening-thrombophilia
- ☐ ADAMTS-13 (sequencing)

Iron panel

- ☐ HFE (H63D, C282Y) (RFLP)
- ☐ HFE (sequencing)
- ☐ Ferroportin common variants (RFLP)
- ☐ Ferroportin (sequencing)
- ☐ HAMP (sequencing)
- ☐ TRF2 (sequencing)
- ☐ HJV (sequencing)
- ☐ TMPRSS6 common variants (RFLP)
- ☐ TMPRSS6 (sequencing)

Immunology / Serology

- ☐ Anti-CMV IgG (ECLIA)
- ☐ Anti-HBs (ECLIA)
- ☐ Anti-HCV (ECLIA)
- ☐ Anti-Mullerian Hormone (AMH)
- ☐ Anti-Rubella IgG (ECLIA)
- ☐ Estradiol (E2)
- ☐ Follicular Stimulating Hormone (FSH)
- ☐ HBsAg (ECLIA)
- ☐ HIV 1/2 Ag/Ab (combo)
- ☐ Luteinizing Hormone (LH)
- ☐ Prolactin
- ☐ Progesterone (P4)
- ☐ Syphilis (RPR)
- ☐ Testosterone
- ☐ COVID-19 Quantitative IgG
- ☐ COVID-19 Neutralizing Ab

Others

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