

NUH PAEDIATRICS ALLERGY & IMMUNOLOGY LABORATORY

Summary of Assay & Specimen Information

Assay	Specimen requirements	Analytic Time (days)	Maximum Laboratory Time	Remarks
Lymphocyte Subsets Enumeration by Flow Cytometry	<ul style="list-style-type: none"> • 3ml EDTA blood for all CD markers ordered on the same day (min 2ml) • 1ml for infants (<15months) • Specimens are to be transported at room temperature no later than 4pm on date of blood drawn. Specimen taken on weekend must arrive within 48 hours from time of blood drawn. 	1-2	3-4 working days	
Neutrophils Oxidative Burst Test by Dihydrorhodamine (DHR)	<ul style="list-style-type: none"> • 3ml lithium heparin blood from patient (minimum 2ml) and a non-related healthy control preferred. (PLEASE INFORM LABORATORY should a related healthy control blood is sent) • 1 ml for infants (<15months) • Reach the laboratory latest by 3pm 	1-2	3-4 working days	
Lymphocytes Proliferation Assay	<p><u>PHA & Con A assay</u></p> <ul style="list-style-type: none"> • 10ml sodium heparin blood from patient • 3-5ml sodium heparin blood for patient age <2 years • 10ml sodium heparin blood from a healthy control <p><u>Anti-CD3 & anti-CD3/CD28 assay</u></p> <ul style="list-style-type: none"> • 10ml sodium heparin blood from patient • 3-5ml sodium heparin blood for patient age <2 years • 10ml sodium heparin blood from a healthy control • Please send 20ml or more for each assay should patient be lymphopenia (less than 1000 lymphocytes per ul) 	7-8	8-10 working days	<p>Mondays and Fridays only</p> <p>For Monday sample, no Public Holidays on either Thursday or Friday of that week.</p> <p>For Friday sample, no Public Holidays on either Monday or Tuesday of the following week.</p>

	<ul style="list-style-type: none"> • Specimens are to be transported at room temperature and reach the laboratory by 12 noon. Overnight specimens will not be processed. 			
Flow Cytometric Crossmatch	<ul style="list-style-type: none"> • 20ml sodium heparin blood from donor and 5ml plain tube from patient • Specimens are to be transported at room temperature and reach the laboratory by 12 noon on day of blood drawn. • Overseas sample collection to contact laboratory for transportation instructions. 	1-2	3-4	
MSMD assay for IL-12/IFN- γ production	<ul style="list-style-type: none"> • Collect 15ml of blood from patient and control in sodium heparin tube • 5ml sodium heparin blood for patient age <2 years • Specimens are to be transported at room temperature and must reach the laboratory before 12 noon. Overnight specimens will not be processed. 	5-7	7-10	Assay perform on Mondays to Wednesdays only. No Public Holidays on following 2 days after sample receipt.
CD40 Ligand Assay	<ul style="list-style-type: none"> • 3ml sodium heparin blood from patient (minimum 2ml) and a non-related healthy control preferred. (PLEASE INFORM LABORATORY should a related healthy control blood is sent) • 1 ml for infants (<15months) • Specimens are to be transported at room temperature and reach the laboratory before or by 12 noon. Overnight specimens will not be processed. 	1-2	3-4	
CD62L Shedding Assay	<ul style="list-style-type: none"> • 3ml sodium heparin blood from patient (minimum 2ml) and a non-related healthy control preferred. (PLEASE INFORM LABORATORY should a related healthy control blood is sent) • 1 ml for infants (<15months) • Specimens are to be transported at room temperature and reach the laboratory latest by 12 noon. Overnight specimens will not be processed. 	1-2	3-4	

Loss of function STAT-3 Phosphorylation Assay	<ul style="list-style-type: none"> • 10ml sodium heparin blood from patient (minimum 6ml) and a non-related healthy control preferred. (PLEASE INFORM LABORATORY should a related healthy control blood is sent) • 3 ml for infants (<15months) • Specimens are to be transported at room temperature and reach the laboratory latest by 12 noon. Overnight specimens will not be processed. 	2-3	3-4	
Anti-IFN- γ Antibody Assay	<ul style="list-style-type: none"> • 3ml EDTA blood from patient • If samples cannot be shipped on the same day. Plasma are to be collected and kept cold (frozen preferred) and dispatch with ice on the next working day. • Specimens taken on the same day are to be transported at room temperature and reach the laboratory latest by 5pm. 	3	10	
IL-10 Receptor Functional Assay	<ul style="list-style-type: none"> • 10ml sodium heparin whole blood from both patient and a normal healthy control • 3 ml for infants (<15months) • Samples to be transported in room temperature and reach laboratory by 12 noon. 	2-3	3-4	

- **Laboratory Address:**
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- **Contact number:** +65 66013306 (08:30 to 18:00, Monday to Friday only)
- **E-mail:** NUHPaedimm@nuhs.edu.sg
- **Opening hours of the Laboratory:**
9:00 – 17:30, Monday to Friday (Closed on Saturday/Sunday/Public Holiday)