IGE
Specimen required: Serum (1 x SST)
Department: Biochemistry
Reference range: < 25 kU/L 84% population non atopic
> 100 kU/L 78% population atopic
Interpretation: HIGH - Allergy, atopic eczema. RAST tests done in conjunction can help pinpoint specific allergens. Other causes of an increased serum IgE level include parasite infestations, chronic bronchopulmonary fungal disease and some immunodeficiency syndromes.

IGF-1
See INSULIN LIKE GROWTH FACTOR 1

IGG SUBCLASSES
Specimen required: Serum (1 x SST)
Department: Referred test
Reference range: As stated on report
Different ranges apply to children. Age must be specified.

IL-6
See INTERLEUKIN 6

IMIPRAMINE (TOFRANIL)
Specimen required: Serum (1 x SST) Collect PRE-DOSE sample (Trough).
Department: Referred
Reference range: As stated on report
Toxic levels at greater than 500ug/L.
Peak Level: 1 - 2 hours after oral dose
Half Life: 9 - 24 hours.

IMMUNOFIXATION (IFE)
Specimen required: Serum (1 x SST)
Department: Biochemistry
Reference range: Not applicable.
Comment: If an abnormal band is detected in the QEP, the band(s) should be confirmed and typed using I.F.E.

IMMUNOFLOUORESCENT SKIN BIOPSY
Specimen required: Contact Laboratory 24 hours before collection to organise solutions
Department: Immunology
Note: Useful for specific inflammatory skin conditions e.g. Suspected Lupus and Bullous pemphigus

IMMUNOGLOBULINS (IGA, IGG, IGM)
Specimen required: Serum (1 x SST)
Department: Biochemistry
Reference range: IgA 0.7 - 4.0 g/L adults
IgG 7.0 - 16.0 g/L adults
IgM 0.4 - 2.3 g/L adults
Interpretation: Low Levels: Often associated with primary or acquired immunodeficiency syndromes.
High Levels: (i) Polyclonal. Infections, liver disease etc
(ii) Monoclonal. Myeloma, Lymphoma, Macroglobulinaemia
IMMUNOPHENOTYPING (IPT1 / IPT2 / IPT2A)

Specimen required: 1 x ACD/CPDA blood (Pale yellow top) and 1 x EDTA

Department: Haematology

Comment: Includes requests for CD4/CD8 RATIO, NK CELLS, LYMPHOCYTE SURFACE MARKERS, T-CELLS & SUBSETS, B CELLS, CD MARKERS and LYMPHOCYTE ACTIVATION MARKERS

- CD3* - Circulating T cells
- CD4* - T Helper cells
- CD8* - T Suppressor cells
- CD5&/orCD56 - Mature T cells, B cells subset, thymocytes
- CD16 - NK Cells
- CD19 - B cells, precursor B cells
- CD20 - B cells, precursor B cell subset
- HLA DR+ - B cells, activated T cells

Kappa / Lambda light chains

* Reported as a percentage of total lymphocytes as well as absolute values where indicated.

For immunological assessment

CD3, 4, 8, 16, 56 and 19 are performed. A CD 4/8 Ratio is calculated.

For investigation of lymphocytic leukaemia, chronic lymphoma or chronic lymphocytosis, the additional markers CD5, 20 and HLA DR+ are performed. Kappa/Lambda studies performed as required.

Reference range: As reported. Haematologist comment where relevant

Note: For other immunophenotyping - 5 ml of EDTA blood is required (referred to RPH Immunology Department).

IM SCREEN (INFECTIOUS MONONUCLEOSIS SCREEN)

Specimen required: 1 x EDTA or 1 x SST

Department: Haematology

Reference range: Negative.

Note: This test may be negative in children with EBV infection. Specific EBV serology (IgG & IgM) is also available. See EBV SEROLOGY

INFLUENZA PCR

Specimen required: Throat and/or anterior nasal dry swab (no transport media)

Department: Microbiology (Kit used Quickvu)

See also: VIRUS DETECTION

Comment: Viral transport media should be used if viral culture is required

INFLUENZA (RAPID TEST)

Specimen required: Nasal swab x2 at height of catarrhal symptoms, within one-two days of symptoms only

PNA may also be used

Department: Microbiology

Note: Specimens need to be sent to the Laboratory within 2-4 hours so that rapid results will be meaningful.

For patients with suspected bird flu, please notify the microbiologist prior to testing as special requirements are needed.

Although a negative result on a rapid influenza test does not rule out influenza, it does indicate that the patient is no longer likely to respond to specific anti-viral medications which are best started within 1-2 days of influenza.

Comment: Rapid identification of Influenza virus enables patient to be commenced on appropriate anti-viral agents now available Zanamivir (Relenza) and Oseltamivir (Tamiflu).

See also: RESPIRATORY VIRUS DETECTION

INFLUENZA SEROLOGY

Specimen required: Serum (1 x SST)

Department: Referred test

Indications: May include fever, fatigue, headache, myalgia and pneumonia.

Consider also Mycoplasma, Bordetella, and Chlamydia, Legionella, other bacterial pneumonias and respiratory viruses.

See also: RESPIRATORY VIRUS DETECTION
INFLUENZA VIRUS IMMUNOFLUORESCENCE
See RESPIRATORY VIRUS IMMUNOFLUORESCENCE

INR (INTERNATIONAL NORMALISED RATIO)
See PROTHROMBIN TIME

INSULIN
Specimen required: Serum (1 x SST) – Fluoride Oxalate NOT suitable. Patient must be fasting
Department: Biochemistry
Reference range: Fasting - < 20 mU/L
Note: Performed as a FASTING test together with a Glucose assay. Hyperinsulinaemia is associated with insulin Type 2 Diabetes mellitus, PCOS and metabolic syndrome.

INSULIN ANTIBODIES
Specimen required: Serum (1 x SST). Patient must be fasting. Spin and freeze ASAP
Department: Referred test

INSULIN LIKE GROWTH FACTOR 1 (IGF-1)
Specimen required: Serum (1 x SST) – Separate and freeze as soon as possible after collection
Department: Biochemistry
Note: If collected with Growth hormone, patient needs to be Fasting, and resting for ~30 min.

INSULIN LIKE GROWTH FACTOR BP-3 (IGF-BP3)
Specimen Required: Serum (1 x SST) - Freeze as soon as possible (urgent courier NOT required).
Patient needs to be fasting, and resting for ~30 min.
Department: Referred test

INSULIN RESISTANCE
Specimen required: Serum (1 x SST) & Glucose tube (Oxalate) – MUST BE FASTING
Department: Biochemistry
Reference range: Glucose / Insulin Ratio > 10

INTERLEUKIN 6
Specimen required: Serum (1 x SST) - Refrigerate
Department: Referred test
Note: No medicare rebate is available for this test. Please contact Duty manager for current cost if required.

INTRINSIC FACTOR ANTIBODIES
Specimen required: Serum (1 x SST)
Department: Referred test

INTRAVENOUS CATHETER TIP CULTURE
Specimen required: Cut off tip with sterile scissors and place in sterile yellow topped jar
Department: Microbiology

IODINE LEVELS
Specimen required: Spot urine or 24 hour urine (no preservative)
Department: Referred test

IONISED CALCULM
See CALCIUM (IONISED)
IPT1 OR IPT2/IPT2A
See IMMUNOPHENOTYPING

IRON (FE)
Specimen required: Serum (1 x SST)
Department: Biochemistry
Reference range: Males: 8.1 – 28.6 umol/L
                 Females: 5.4 – 28.6 umol/L
Interpretation: LOW - Iron deficiency anaemia, acute and chronic disease states, diurnal variation
                HIGH - Iron therapy, haemochromatosis, and liver disease

IRON STUDIES (IS)
Specimen required: Serum (1 x SST)
Department: Biochemistry
Tests include: SERUM IRON, TRANSFERRIN, SATURATION (%), FERRITIN.

ISLET CELL ANTIBODIES
Specimen required: Serum (1 x SST)
Department: Referred test