EMA Binding Assay (HS Screen)

General information

The assay is useful in the diagnosis of Hereditary Spherocytosis (HS). The results should be interpreted alongside a full blood count and morphological assessment of a peripheral blood film. These are not performed by this laboratory and must be interpreted as per local guidelines.

Specimen transport: At room temperature.

Repeat frequency: At significant change of clinical symptoms, or if the patient is <6 months of age and the results are not consistent with the clinical pattern please repeat when >6 months of age.

Special precautions: The assay should be carried out on blood that is <24 hours old. Samples can be stored at 4°C prior to analysis.

Laboratory information

Normal reference range: Normal

Volume and sample type: 1ml EDTA blood

Method: Flow cytometry

Turnaround time (calendar days from sample receipt to authorised result): Median - 4

Clinical information

Indications for the test: Diagnosis of Hereditary Spherocytosis

Factors affecting the test: Samples will be rejected if >72 hours old.

False positive results may occur for a wide spectrum of clinical conditions and rare red cell disorders unrelated to cytoskeleton defects e.g. Hereditary pyropoikilocytosis, Cryohydrocytosis, Congenital dyserythropoietic anaemia, South-East Asian ovalocytosis. Therefore caution is required when a positive test result for HS is not compatible with the clinical presentation and red cell morphology.

(Bolton-Maggs et al (2011) Guidelines for the diagnosis and management of hereditary spherocytosis – 2011 update. *British Journal of Haematology,* **156,** 37-49)

ICE reference: HS Screen

(Last updated May 2022)