



TEST: ERYTHROCYTE SEDIMENTATION RATE (ESR)

PRINCIPLE:

The Erythrocyte Sedimentation Rate (ESR) is a nonspecific assay used to screen for the presence or absence of active disease. The settling of red corpuscles (red blood cells - RBCs) is due to the differential densities of the RBCs and their medium. Most often, an increased ESR is due to an increased amount of plasma proteins (i.e., acute phase globulins) and less commonly to inherent characteristics of RBCs (Wintrobe 30). ESR is measured in mm/hr using the Modified Westergren Method.

SPECIMEN REQUIREMENTS:

Whole blood collected in EDTA is the only acceptable specimen. Specimens must be brought to the laboratory within 4 hours of the blood draw if kept at room temperature. Alternately, whole blood may be refrigerated and brought to the laboratory within 12 hours of the blood draw. Clotted or hemolyzed samples are not acceptable.

METHOD:

SEDIPLAST WESTERGREN.

REFERENCES:

1. Lee, G. Richard et al. *Wintrobe's Clinical Hematology* 9th ed., Lea and Febiger, Philadelphia, 1993.
2. SmithKline Beecham Directory of Services Reference Guide 1997 – 1998.
3. Streck ESR – Chex Product Insert 1998

Normal Range :

	Male	Female
50 yrs. old or less	15mm/hr	20mm/hr
over 50 yrs. old	20mm/hr	30mm/hr

Turnaround time: One Day