

Erythrocyte Protoporphyrin in Whole Blood- Free erythrocyte protoporphyrin (FEP) is measured by a modification of the method of Sassa et al. (1). Protoporphyrin is extracted from EDTA-whole blood into a 2:1 (v/v) mixture of ethyl acetate-acetic acid, then back-extracted into diluted hydrochloric acid. The protoporphyrin in the aqueous phase is measured fluorometrically at excitation and emission wavelengths of 404 and 655 nm, respectively. Calculations are based on a processed protoporphyrin IX (free acid) standard curve. After a correction for the individual hematocrit is made, the final concentration of protoporphyrin in a specimen is expressed as micrograms per deciliter of packed red blood cells ( $\mu\text{g/dL RBC}$ ).

1. Sassa S, Granick JL, Granick S, Kappas A, Levere RD. Microanalyses of erythrocyte protoporphyrin levels by spectrophotometry in the detection of chronic lead intoxication in the subclinical range. *Biochem Med* 1973;8: 135-48.

-from *Laboratory Procedures Used for the Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994*  
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