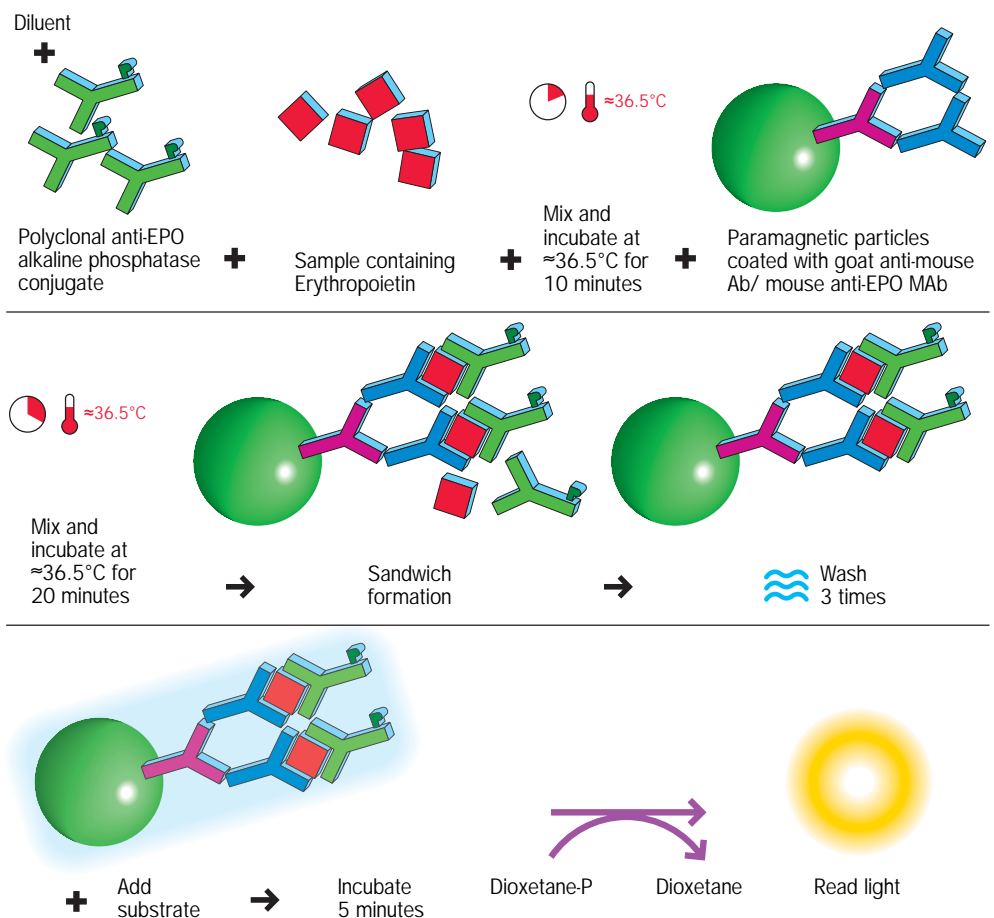


- For the quantitative determination of erythropoietin in serum and plasma
- Access® chemiluminescent technology delivers highly specific and sensitive performance
- Automated assays provide high throughput
- Broad dynamic range: 0.6-750 mIU/mL
- No hook effect up to 30,000 mIU/mL
- Open-pack and calibration stability: 28 days
- Traceable to WHO 2nd IRP 67/343

2-site sandwich technique



Signal produced is directly proportional to the erythropoietin concentration in the sample.



Erythropoietin (EPO)

Clinical Indications

Comparison of Polycythemia vera and Secondary Polycythemia

	Polycythemia vera	Secondary Polycythemia
<i>Pathophysiology</i>	Neoplastic hematopoietic stem cell disorder	<ul style="list-style-type: none"> Tissue hypoxia causing an appropriate increase in EPO production Renal or hepatic disease causing an inappropriate increase in EPO production
<i>CBC</i>	RBC, hematocrit (Hct) are increased; WBC and platelets are often also increased	RBC and Hct are increased
<i>EPO level</i>	Decreased in most cases	Normal or increased
<i>Treatment</i>	Phlebotomy or hydroxyurea or radioactive phosphorus to keep Hct below 46 percent	Treatment depends on the underlying cause

Chronic Renal Disease

In chronic renal failure (CRF), decreased synthesis of EPO by the kidneys and corresponding low levels of serum EPO may cause anemia. Serum EPO measurement may be useful in the evaluation of CRF that is not corrected by recombinant human EPO (rhEPO) therapy.

rhEPO Therapy in Cancer

rhEPO therapy has been used to treat cancer-related anemia by helping to decrease blood transfusions and enhance the quality of life. Prior to therapy a number of clinical factors should be analyzed including the following laboratory evaluations:

- Serum EPO level:** Studies have indicated that a baseline serum level of EPO greater than 500 mIU/mL is predictive of lack of response to therapy. However, one study found that evaluation of the serum EPO level and the observed change in hemoglobin levels after two weeks of therapy provided a better indication of a predictive response.
- Iron Evaluation:** Adequate levels of iron reserve are necessary to support the red blood cell formation which is stimulated by EPO treatment. Ferritin levels less than 200 ug/L may require intravenous iron therapy in patients receiving rhEPO therapy.

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Characteristics

Sample Type/Size	Serum or plasma (heparin)/85 µL
Time to First Result	≤ 45 minutes
Analytical Sensitivity	≤ 0.60 mIU/mL
Calibrator Levels	0, and approximately 5, 25, 125, 375 and 750 mIU/mL
Expected Values	2.59 – 18.50 mIU/mL
Open Pack Stability	28 days
Calibration Stability	28 days
Imprecision	≤ 10% at EPO concentrations > 3 mIU/mL

Ordering Information

Access® EPO - 2 packs of 50 tests/pack	A16364
Access® EPO Calibrators - S1-S5, 2.5 mL/vial, S0, 10 mL/vial	A16365



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