

DESCRIPTION

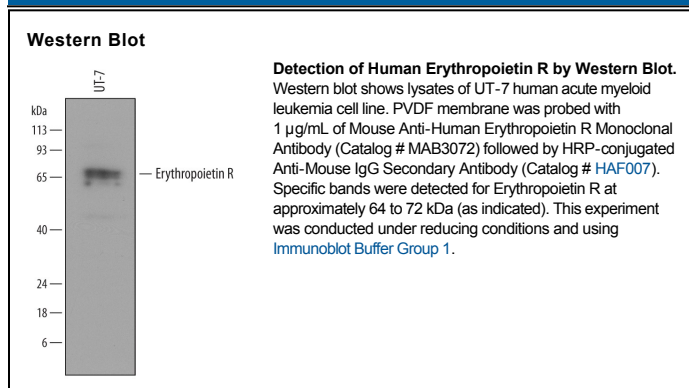
Species Reactivity	Human
Specificity	Detects human Erythropoietin R in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 690748
Purification	Protein A or G purified from ascites
Immunogen	A synthetic phosphopeptide corresponding to residues surrounding Y426 of human Erythropoietin R Accession # P19235
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Erythropoietin (Epo), a glycoprotein produced primarily by the kidney, is the principal factor that regulates erythropoiesis by stimulating the proliferation and differentiation of erythroid progenitor cells. The biological effects of Epo are mediated by the Erythropoietin Receptor (Epo R). The full length human Epo R cDNA encodes a type I membrane-spanning protein with 508 amino acid (aa) (a 24 aa hydrophobic signal sequence, a 226 aa extracellular domain, a 22 aa transmembrane domain and a 236 aa cytoplasmic domain). At the protein sequence level, the human Epo R is approximately 82% identical to the mouse protein. As a result of alternative splicing of the Epo R gene, cDNA clones encoding a truncated form of the Epo R as well as the soluble form of Epo R has been found. The presence of a soluble form of the Epo R has also been detected in human sera. Recombinant soluble Epo R binds Epo with high affinity and is a potent Epo antagonist.

References:

1. Barber, D.L. and A.D. D'Andrea (1992) *Seminars in Hematology* **29**:293.
2. Youssoufian, H. *et al.* (1993) *Blood* **9**:2223.
3. Lodish, H.F. *et al.* (1995) *Cold Spring Harbor Symposia on Quantitative Biology* LX:93.
4. Baynes, R.D. *et al.* (1993) *Blood* **82**:2088.