**BACKGROUND**

Erythropoiesis is regulated through the interaction of erythropoietin (Epo) with its receptor, EpoR, a member of the cytokine superfamily of receptors. The human EpoR is a 507 amino acid transmembrane protein that forms homodimers following erythropoietin activation and is related to the interleukin 2 (IL-2) receptor β-chain subunit (IL-2Rβ). EpoR and IL-2Rβ share 45% amino acid identity within the box 1 and box 2 domains of their cytoplasmic regions while their remaining cytoplasmic sequences are highly divergent. These conserved domains are both required and sufficient for mitogenesis and for coupling ligand binding to the induction of tyrosine phosphorylation. The membrane proximal region is also required for the association of JAK2 with EpoR. The existence of multiple cross-linked complexes and differential ligand affinities suggests that EpoR may exist as a multireceptor complex.

**CHROMOSOMAL LOCATION**

Genetic locus: EPOR (human) mapping to 19p13.2.

**SOURCE**

EpoR (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of EpoR of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-695 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

EpoR (C-20) is recommended for detection of erythropoietin (Epo) receptor of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with HSP70.

EpoR (C-20) is also recommended for detection of erythropoietin (Epo) receptor in additional species, including canine and bovine.

Suitable for use as control antibody for EpoR siRNA (h): sc-37092, EpoR shRNA Plasmid (h): sc-37092-SH and EpoR shRNA (h) Lentiviral Particles: sc-37092-V.

Molecular Weight of EpoR: 66/78 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or Jurkat whole cell lysate: sc-2204.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**DATA**

![Western blot analysis of EpoR expression in K-562 (A) and Jurkat (B) whole cell lysates.](image)

**SELECT PRODUCT CITATIONS**


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