



DATA SHEET

Datasheet: AHP1825

Description:	SHEEP ANTI HUMAN ERYTHROPOIETIN RECEPTOR
Specificity:	ERYTHROPOIETIN RECEPTOR
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 mg

Product Details

Applications This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
Immunohistology - Resin			■	
ELISA	■			50ng/ml
Immunoprecipitation	■			10ug/ml
Western Blotting	■			10ug/ml

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Species Cross Reactivity	Reacts with: Mouse N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Antiserum Preparation	Antiserum to human EPOR was raised by repeated immunisation of sheep with highly purified antigen. Purified IgG was prepared by affinity chromatography.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Partial cDNA of the extracellular domain of human EPOR expressed as a GST fusion protein in <i>E. Coli</i> .
External Database Links	UniProt: P19235 EPOR_HUMAN Related reagents P14753 EPOR_MOUSE Related reagents Entrez Gene: 2057 EPOR Related reagents 13857 Epor Related reagents

Specificity AHP1825 recognises Erythropoietin Receptor (EPOR), a type I transmembrane protein and member of the type I cytokine receptor family, expressed by erythroid cells and erythroid progenitor cells, which acts as a receptor for erythropoietin (EPO) to mediate erythroblast proliferation and differentiation, and maintain progenitor survival.

Binding of EPO to EPOR, results in the dimerization of the EPOR and the triggering of the JAK2/STAT5 signaling cascade, and in some cell types activation of STAT1 and STAT3. Several isoforms of EPOR exist: EPOR-F, EPOR-S and EPOR-T, and a functional EPOR is found on endothelial cells and cardiomyocytes within the cardiovascular system, suggesting a role in cardiac function.

AHP1825 has been shown to block Iodine¹²⁵ labelled erythropoietin ligand binding using erythroleukemia cell line TF-1 with 3000 EPOR/cell in neutralization studies⁽¹⁾.

AHP1825 is reported as suitable for use in immunocytochemistry.

AHP1825 has been reported for use in functional studies. Removal of Sodium Azide is recommended prior to use in functional assays. AbD Serotec recommend the use of [EQU003](#) for this purpose. The recommended concentration for functional assays is 500ug/ml.

ELISA This product is suitable for use in indirect ELISA applications.

Western Blotting AHP1825 detects a 49kDa band of EPOR-GST on SDS-PAGE.

References 1. Harris, K.W.*et al.* (1992) Ligand binding properties of the human erythropoietin receptor extracellular domain expressed in Escherichia coli. [J. Biol. Chem. 267: 15205-15209.](#)

Storage Store at +4°C.
DO NOT FREEZE.
This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life 18 months from date of despatch.

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