



Anti-Erythropoietin monoclonal antibody, clone AE7A5 (CABT-49123MH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

Mouse anti Human Erythropoietin antibody, clone AE7A5 recognizes human erythropoietin (EPO) and binds to an epitope within the first 26 amino acids of the N-terminus of human urinary and human recombinant EPO. EPO is a 166 amino acid ~30 kDa glycoprotein hormone secreted primarily by the kidney that stimulates bone marrow erythropoiesis in response to hypoxia or anemia. The cDNAs for Epo have been cloned from many species and the mature proteins from the various species are highly conserved, exhibiting greater than 80% sequence identity at the amino acid level. Mouse anti Human Erythropoietin antibody, clone AE7A5 is the primary antibody sanctioned by the World Anti Doping Agency for the identification and evaluation of natural and recombinant erythropoietin by western blotting in biological samples. In addition to recognizing both recombinant and native human erythropoietin, clone AE7A5 cross reacts with zinc-alpha-2-glycoprotein, this reactivity is well separated from that of erythropoietin and does not interfere with the EPO testing assay.

Specificity	EPO
Target	Erythropoietin
Immunogen	A 26 amino acid synthetic peptide corresponding to the N-terminal region of human erythropoietin with the sequence APPRLICDSRVLERYLLEAKEAENIT.
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Human, Rat
Clone	AE7A5
Conjugate	Unconjugated

Applications	WB
Format	Purified IgG - liquid
Size	250 µg
Preservative	0.09% Sodium Azide
Storage	in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

GENE INFORMATION

Gene Name	EPO erythropoietin [Homo sapiens (human)]
Official Symbol	EPO
Synonyms	EPO; erythropoietin; EP; MVCD2; epoetin;
Entrez Gene ID	2056
Protein Refseq	NP_000790
UniProt ID	P01588
Chromosome Location	7q22
Pathway	Cellular response to hypoxia; Cellular responses to stress; Cytokine-cytokine receptor interaction; EPO Receptor Signaling; EPO signaling pathway; HIF-1 signaling pathway; HIF-1-alpha transcription factor network; HIF-2-alpha transcription factor network;
Function	erythropoietin receptor binding; hormone activity; protein binding; protein kinase activator activity;