Datasheet for ABIN6719435

anti-EPO antibody (AA 28-193)

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Overview

Quantity:	100 µg
Target:	EPO
Binding Specificity:	AA 28-193
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This EPO antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Purpose:	Anti-Erythropoietin EPO Antibody Picoband®
Immunogen:	E.coli-derived human EPO recombinant protein (Position: A28-R193).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-Erythropoietin EPO Antibody (ABIN6719435). Tested in ELISA, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	EPO
Alternative Name:	EPO (EPO Products)
Target Type:	Hormone
Background:	Synonyms: Erythropoietin, Epoetin, EPO Tissue Specificity: Produced by kidney or liver of adult mammals and by liver of fetal or neonatal mammals. Background: This EPO gene encodes a secreted, glycosylated cytokine composed of four alpha helical bundles. The encoded protein is mainly synthesized in the kidney, secreted into the blood plasma, and binds to the erythropoietin receptor to promote red blood cell production, or erythropoiesis, in the bone marrow. Expression of this gene is upregulated under hypoxic conditions, in turn leading to increased erythropoiesis and enhanced oxygen-carrying capacity of the blood. Expression of this gene has also been observed in brain and in the eye, and elevated expression levels have been observed in diabetic retinopathy and ocular hypertension. Recombinant forms of the encoded protein exhibit neuroprotective activity against a variety of potential brain injuries, as well as antiapoptotic functions in several tissue types, and have been used in the treatment of anemia and to enhance the efficacy of cancer therapies.
Molecular Weight:	29 kDa
Gene ID:	2056
UniProt:	P01588
Pathways:	JAK-STAT Signaling, Hormone Activity, Negative Regulation of intrinsic apoptotic Signaling, Negative Regulation of Transporter Activity

Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL ELISA, 0.1-0.5 µg/mL 1. Hosseini-Zare MS, Dashti-Khavidaki S, Mahdavi-Mazdeh M, Ahmadi F, Akrami S (2012). "Peripheral neuropathy response to erythropoietin in type 2 diabetic patients with mild to moderate renal failure". Clinical Neurology and Neurosurgery. 114 (6): 663-7. 2. Middleton SA, Barbone FP, Johnson DL, Thurmond RL, You Y, McMahon FJ, Jin R, Livnah O, Tullai J, Farrell FX, Goldsmith MA, Wilson IA, Jolliffe LK (1999). "Shared and unique determinants of the erythropoietin (EPO) receptor are important for binding EPO and EPO mimetic peptide". The Journal of Biological Chemistry. 274 (20): 14163-9.

Application Details

Comment:	Tested Species: In-house tested species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.