

Datasheet for ABIN5692979

anti-APEX1 antibody (AA 2-318) (DyLight 488)[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	APEX1
Binding Specificity:	AA 2-318
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This APEX1 antibody is conjugated to DyLight 488
Application:	Flow Cytometry (FACS)

Product Details

Purpose:	Anti-Human APE1 DyLight® 488 conjugated APEX1 Antibody(monoclonal, 5C11)
Immunogen:	E.coli-derived human APE1 recombinant protein (Position: P2-L318). Human APE1 shares 94% and 93% amino acid (aa) sequence identity with mouse and rat APE1, respectively.
Clone:	5C11
Isotype:	IgG2b
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-Human APE1 DyLight® 488 conjugated APEX1 Antibody (monoclonal, 5C11) (ABIN5692978)-Dyl488. Tested in Flow Cytometry applications. This antibody reacts with Human.

Target Details

Target:	APEX1
Alternative Name:	APEX1 (APEX1 Products)
Background:	Synonyms: DNA- (apurinic or apyrimidinic site) lyase, APEX nuclease, APEN, Apurinic-apyrimidinic endonuclease 1, AP endonuclease 1, APE-1, REF-1, Redox factor-1, DNA- (apurinic or apyrimidinic site) lyase, mitochondrial, APEX1, APE, APE1, APEX, APX, HAP1, REF1 Background: APEX1, also called apurinic endonuclease (APE), is a DNA repair enzyme having apurinic/apyrimidinic (AP) endonuclease, 3-prime, 5-prime-exonuclease, DNA 3-prime repair diesterase, and DNA 3-prime-phosphatase activities. The human APEX1 gene consists of 5 exons spanning 2.64 kb and exists as a single copy in the haploid genome. Using in situ hybridization, the APEX1 gene is mapped to 14q11.2-q12. The predicted APEX1 protein, which contained probable nuclear transport signals, was identified as a member of a family of DNA repair enzymes found in lower organisms. The abundance of the large form of APEX1 was increased in leiomyoma extracts relative to myometrial tissue extracts, and the large form was dominant in cell lines derived from leiomyosarcomas. The exonuclease activity of nuclear APEX1 can remove the anti-HIV nucleoside analogs AZT and D4T from the 3-prime terminus of a nick more efficiently than can cytosolic exonucleases.
Molecular Weight:	39 kDa
Gene ID:	328
UniProt:	P27695
Pathways:	DNA Damage Repair , Chromatin Binding , Cell RedoxHomeostasis , Smooth Muscle Cell Migration , Positive Regulation of Response to DNA Damage Stimulus

Application Details

Application Notes:	Flow Cytometry (Fixed), 1-3 µg/1x10⁶ cells¹. Akiyama, K., Seki, S., Oshida, T., Yoshida, M. C.Structure, promoter analysis and chromosomal assignment of the human APEX gene.Biochim. Biophys. Acta 1219: 15-25, 1994. 2. Chou, K.-M., Cheng, Y.-C.An exonucleolytic activity of human apurinic/apyrimidinic endonuclease on 3-prime mispaired DNA.Nature 415: 655-659, 2002. 3. Robson, C. N., Hochhauser, D., Craig, R., Rack, K., Buckle, V. J., Hickson, I. D.Structure of the human DNA repair gene HAP1 and its localisation to chromosome 14q11.2-12.Nucleic Acids Res. 20: 4417-4421, 1992.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	Each vial contains 50 % glycerol, 0.9 % NaCl, 0.2 % Na ₂ HPO ₄ , 0.02 % 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:	-20 °C
Storage Comment:	At -20°C for one year from date of receipt. Avoid repeated freezing and thawing. Protect from light.