

Product datasheet for PH313298

OriGene Technologies, Inc.

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APE1 (APEX1) (NM 080649) Human Mass Spec Standard

Product data:

Product Type: Mass Spec Standards

Description: APEX1 MS Standard C13 and N15-labeled recombinant protein (NP_542380)

Species: Human **HEK293 Expression Host:**

Expression cDNA Clone

RC213298

or AA Sequence: Predicted MW:

35.6 kDa

>RC213298 protein sequence **Protein Sequence:**

Red=Cloning site Green=Tags(s)

MPKRGKKGAVAEDGDELRTEPEAKKSKTAAKKNDKEAAGEGPALYEDPPDQKTSPSGKPATLKICSWNVD GLRAWIKKKGLDWVKEEAPDILCLQETKCSENKLPAELQELPGLSHQYWSAPSDKEGYSGVGLLSRQCPL KVSYGIGDEEHDQEGRVIVAEFDSFVLVTAYVPNAGRGLVRLEYRQRWDEAFRKFLKGLASRKPLVLCGD LNVAHEEIDLRNPKGNKKNAGFTPQERQGFGELLQAVPLADSFRHLYPNTPYAYTFWTYMMNARSKNVGW

RLDYFLLSHSLLPALCDSKIRSKALGSDHCPITLYLAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

C-Myc/DDK Tag:

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Concentration: >0.05 µg/µL as determined by microplate BCA method

Labeling Method: Labeled with [U-13C6, 15N4]-L-Arginine and [U-13C6, 15N2]-L-Lysine

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Store at -80°C. Avoid repeated freeze-thaw cycles. Storage:

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 542380

RefSeq Size: 1507 RefSeq ORF: 954

Synonyms: APE; APE1; APEN; APEX; APX; HAP1; REF1

Locus ID: 328





UniProt ID: <u>P27695</u>, <u>Q5TZP7</u>

Cytogenetics: 14q11.2

Summary: The APEX gene encodes the major AP endonuclease in human cells. It encodes the APEX

endonuclease, a DNA repair enzyme with apurinic/apyrimidinic (AP) activity. Such AP activity sites occur frequently in DNA molecules by spontaneous hydrolysis, by DNA damaging agents or by DNA glycosylases that remove specific abnormal bases. The AP sites are the most

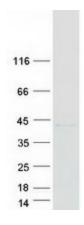
frequent pre-mutagenic lesions that can prevent normal DNA replication. Splice variants have been found for this gene; all encode the same protein. Disruptions in the biological functions related to APEX are associated with many various malignancies and neurodegenerative

diseases.[provided by RefSeq, Dec 2019]

Protein Families: Druggable Genome, Stem cell - Pluripotency, Transcription Factors

Protein Pathways: Base excision repair

Product images:



Coomassie blue staining of purified APEX1 protein (Cat# [TP313298]). The protein was produced from HEK293T cells transfected with APEX1 cDNA clone (Cat# [RC213298]) using MegaTran 2.0 (Cat# [TT210002]).