

Recombinant Human SMYD3/ZMYND1 Protein (His&FLAG Tag)

Catalog No. PKSH031188

Note: Centrifuge before opening to ensure complete recovery of vial contents.

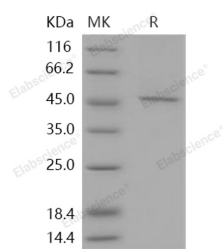
Description

Synonyms	bA74P14.1;KMT3E;ZMYND1;ZNFN3A1
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Ser 428
Accession	NP_001161212.1
Calculated Molecular Weight	51.5 kDa
Observed molecular weight	49 kDa
Tag	C-His & N-Flag
Bioactivity	Not validated for activity

Properties

Purity	> 70 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 25mM Tris-HCl, 100mM NaCl, 20% glycerol, 3mM DTT, pH 8.0 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 70 % as determined by reducing SDS-PAGE.

Background

SET and MYND domain-containing protein 3, also known as Zinc finger MYND domain-containing protein 1, SMYD3,

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and ZMYND, is a member of the histone-lysine methyltransferase family. SMYD3 contains oneMYND-type zinc finger and oneSET domain. SMYD3 is a histone H3 lysine-4-specific methyltransferase. It is expressed in skeletal muscles and testis. It is overexpressed in a majority of colorectal carcinoma (CRC) and hepatocellular carcinoma (HCC). SMYD3 plays an important role in transcriptional regulation in human carcinogenesis. It activates the transcription of a set of downstream genes. Of these downstream genes, there are several oncogenes and genes associated with cell adhesion (including those of N-Myc, CrkL, Wnt10b, L-selectin, CD31 and galectin-4), which have been shown to have effects on cell viability, adhesion, migration and metastasis. Increased SMYD3 expression is essential for the proliferation of breast cancer cells. SMYD3 may be a promising new target of therapeutic intervention for the treatment of cancers or other pathological processes associated with cell adhesion and migration.