Datasheet for ABIN2669689

KAP1 Protein (AA 624-811) (His tag,DYKDDDDK Tag)

1 Image

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Overview

Quantity:	100 µg
Target:	KAP1 (TRIM28)
Protein Characteristics:	AA 624-811
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KAP1 protein is labelled with His tag,DYKDDDDK Tag.
Application:	Binding Studies (Bind), Screening Assay (ScA)

Product Details

Characteristics:	The peptide corresponding to amino acids 624-811 that contains the bromodomain sequences of TRIM28 (accession number NP_005753.1) was expressed in E. coli and contains an N-terminal His tag and C-terminal FLAG tag with an observed molecular weight of 26.18 kDa.

Target Details

Target:	KAP1 (TRIM28)
Alternative Name:	TRIM28 (TRIM28 Products)
Background:	Tripartite motif-containing 28 (TRIM28) protein, also known as transcriptional intermediary factor 1β (TIF1β) and KAP1 (Krüppel-associated protein), is a member of the transcriptional intermediary factor 1 (TIF1) family that control transcription and chromatin remodeling through their interaction with transcription factors. The family includes enhances transcriptional

Target Details

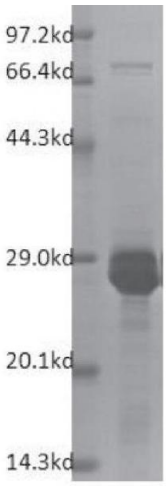
	repression by coordinating the increase in TRIM24 (TIF1α), TRIM28 (TIF1β) and TRIM33 (TIF1γ) that share a characteristic domain structure comprised of multiple histone-binding domains, an N-terminal TRIM region (containing a RING domain, B box type 1 and type 2 domains, and a coiled-coil region), and a C-terminal bromodomain and PHD finger. Bromodomains function as 'readers' of epigenetic histone marks and regulate chromatin structure and gene expression by linking associated proteins to the recognized acetylated nucleosomal targets. TRIM28 has been shown to function as a nuclear corepressor for KRAB domain-containing zinc finger proteins (KRAB-ZFPs). It also mediates gene silencing by recruiting CHD3, a subunit of the nucleosome remodeling and deacetylation (NuRD) complex, and SETDB1 (which specifically methylates histone H3 at lysine 9) to the promoter regions of KRAB target genes. TRIM28 enhances transcriptional repression by coordinating the increase in H3K9 methylation, the decrease in H3K9 and H3K14 acetylation, respectively, and the disposition of HP1 proteins to silence gene expression. It also acts as a corepressor for ErbB-4. TRIM28 inhibits E2F1 activity by stimulating E2F1-HDAC1 complex formation and inhibiting E2F1 acetylation and may serve as a partial backup to prevent E2F1-mediated apoptosis in the absence of pRb. TRIM28 has E3 SUMO-protein ligase activity toward itself via its PHD-type zinc finger. TRIM28 also specifically SUMOylates IRF7, inhibiting its transactivation activity, and ubiquitinates p53 leading to its proteosomal degradation.
Molecular Weight:	26.18 kDa
Pathways:	Hedgehog Signaling, Positive Regulation of Response to DNA Damage Stimulus

Application Details

Application Notes:	Recombinant TRIM28 (624-811) is suitable for use in binding assays, inhibitor screening, and selectivity profiling.
Restrictions:	For Research Use only

Handling

Handling Advice:	Avoid repeated freeze/thaw cycles and keep on ice when not in storage.
Storage:	-80 °C
Storage Comment:	Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation.



Western Blotting

Image 1. Recombinant TRIM28 (624-811) protein gel. TRIM28 (624-811) protein was run on an SDS-PAGE gel and stained with Coomassie blue.