

Product name:	TRAP230 Rabbit Polyclonal Antibody
Cat number:	ABN19225
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human MED12. AA range:611-660
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

The initiation of transcription is controlled in part by a large protein assembly known as the preinitiation complex. A component of this preinitiation complex is a 1.2 MDa protein aggregate called Mediator. This Mediator component binds with a CDK8 subcomplex which contains the protein encoded by this gene, mediator complex subunit 12 (MED12), along with MED13, CDK8 kinase, and cyclin C. The CDK8 subcomplex modulates Mediator-polymerase II interactions and thereby regulates transcription initiation and reinitiation rates. The MED12 protein is essential for activating CDK8 kinase. Defects in this gene cause X-linked Opitz-Kaveggia syndrome, also known as FG syndrome, and Lujan-Fryns syndrome. [provided by RefSeq, Aug 2009],disease:Defects in MED12 are the cause of Lujan-Fryns syndrome [MIM:309520]; also known as X-linked mental retardation with marfanoid habitus. Clinically, Lujan-Fryns syndrome can be distinguished from Opitz-Kaveggia syndrome by tall stature, hypernasal voice, hyperextensible digits and high nasal root.,disease:Defects in MED12 are the cause of Opitz-Kaveggia syndrome (OKS) [MIM:305450]; also known as FG syndrome type 1 (FGS1) or FG syndrome (FGS). OKS is an X-linked disorder characterized by mental retardation, relative macrocephaly, hypotonia and constipation.,function:Component of the Mediator complex, a coactivator involved in the regulated transcription of nearly all RNA polymerase II-dependent genes. Mediator functions as a bridge to convey information from gene-specific regulatory proteins to the basal RNA polymerase II transcription machinery. Mediator is recruited to promoters by direct interactions with regulatory proteins and serves as a scaffold for the assembly of a functional preinitiation complex with RNA polymerase II and the general transcription factors. This subunit may specifically regulate transcription of targets of the Wnt signaling pathway and SHH signaling pathway.,similarity:Belongs to the Mediator complex subunit 12 family.,subunit:Component of the Mediator complex, which is composed of MED1, MED4, MED6, MED7, MED8, MED9, MED10, MED11, MED12, MED13, MED13L, MED14, MED15, MED16, MED17, MED18, MED19, MED20, MED21, MED22, MED23, MED24, MED25, MED26, MED27, MED29, MED30, MED31, CCNC, CDK8 and CDC2L6/CDK11. The MED12, MED13, CCNC and CDK8 subunits form a distinct module termed the CDK8 module. Mediator containing the CDK8 module is less active than Mediator lacking this module in supporting transcriptional activation. Individual preparations of the Mediator complex lacking one or more distinct subunits have been variously termed ARC, CRSP, DRIP, PC2, SMCC and TRAP. Also interacts with CTNNB1 and GLI3.,tissue specificity:Ubiquitous.,