
Product Name: TRAP230 Rabbit Polyclonal Antibody**Catalog #: APRab19225**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000

Molecular Weight

Antigen Information

Gene Name	MED12
Alternative Names	MED12; ARC240; CAGH45; HOPA; KIAA0192; TNRC11; TRAP230; Mediator of RNA polymerase II transcription subunit 12; Activator-recruited cofactor 240 kDa component; ARC240; CAG repeat protein 45; Mediator complex subunit 12; OPA-containing prote
Gene ID	9968.0
SwissProt ID	Q93074
Immunogen	The antiserum was produced against synthesized peptide derived from human MED12. AA range:611-660

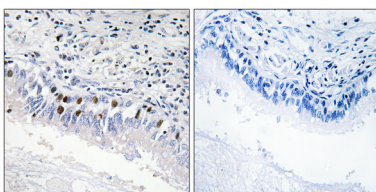
Background

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.,

Research Area

Epigenetics and Nuclear Signaling; Transcription; Polymerase associated factors; Pol II Transcription; RNA polymerase; Mediator Complex

Image Data



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using MED12 Antibody. The picture on the right is blocked with the synthesized peptide.