

Datasheet for ABIN6143590
anti-C6orf150 antibody (AA 350-522)[Go to Product page](#)

7 Images

Overview

Quantity:	100 µL
Target:	C6orf150
Binding Specificity:	AA 350-522
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This C6orf150 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 350-522 of human cGAS (NP_612450.2).
Sequence:	KQLRLKPFYL VPKHAKEGNG FQEETWRLSF SHIEKEILNN HGKSKTCCEN KEECCCRKDC LKLMMKYLLEQ LKERFKDKKH LDKFSSYHVK TAFFHVCTQN PQDSQWDRKD LGLCFDNCVT YFLQCLRTEK LENYFIPEFN LFSSNLIDKR SKEFLTQKIE YERNNEFPVF DEF
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Polyclonal Antibodies
Purification:	Affinity purification

Target Details

Target:	C6orf150
Alternative Name:	CGAS (C6orf150 Products)
Background:	<p>Nucleotidyltransferase that catalyzes the formation of cyclic GMP-AMP (cGAMP) from ATP and GTP and plays a key role in innate immunity (PubMed:23258413, PubMed:23707061, PubMed:23722159, PubMed:24077100, PubMed:25131990, PubMed:29976794, PubMed:30799039). Catalysis involves both the formation of a 2',5' phosphodiester linkage at the GpA step and the formation of a 3',5' phosphodiester linkage at the ApG step, producing c[G(2',5')pA(3',5')p] (PubMed:28363908, PubMed:28214358). Acts as a key cytosolic DNA sensor, the presence of double-stranded DNA (dsDNA) in the cytoplasm being a danger signal that triggers the immune responses (PubMed:28363908). Binds cytosolic DNA directly, leading to activation and synthesis of cGAMP, a second messenger that binds to and activates TMEM173/STING, thereby triggering type-I interferon production (PubMed:28363908, PubMed:28314590). Preferentially recognizes and binds curved long DNAs (PubMed:30007416). In contrast to other mammals, human CGAS displays species-specific mechanisms of DNA recognition and produces less cyclic GMP-AMP (cGAMP), allowing a more fine-tuned response to pathogens (PubMed:30007416). Has antiviral activity by sensing the presence of dsDNA from DNA viruses in the cytoplasm (PubMed:28363908). Also acts as an innate immune sensor of infection by retroviruses, such as HIV-1, by detecting the presence of reverse-transcribed DNA in the cytosol (PubMed:23929945). Detection of retroviral reverse-transcribed DNA in the cytosol may be indirect and be mediated via interaction with PQBP1, which directly binds reverse-transcribed retroviral DNA (PubMed:26046437). Also detects the presence of DNA from bacteria, such as M.tuberculosis (PubMed:26048138). cGAMP can be transferred from producing cells to neighboring cells through gap junctions, leading to promote TMEM173/STING activation and convey immune response to connecting cells (PubMed:24077100).,MB21D1,C6orf150,cGAS,h-cGAS,CGAS,Cell Biology & Developmental Biology,CGAS</p>
Molecular Weight:	49 kDa/58 kDa
Gene ID:	115004
UniProt:	Q8N884
Pathways:	Activation of Innate immune Response

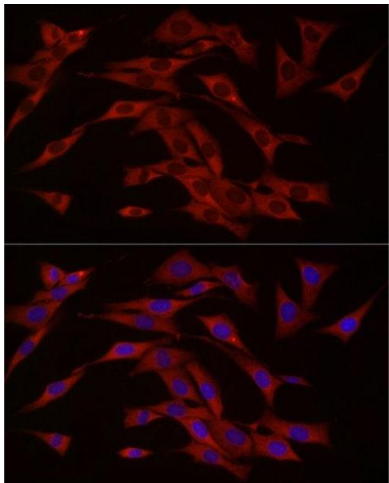
Application Details

Application Notes:	WB,1:500 - 1:2000,IHC,1:50 - 1:200,IF,1:50 - 1:100,IP,1:50 - 1:100
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Application Details

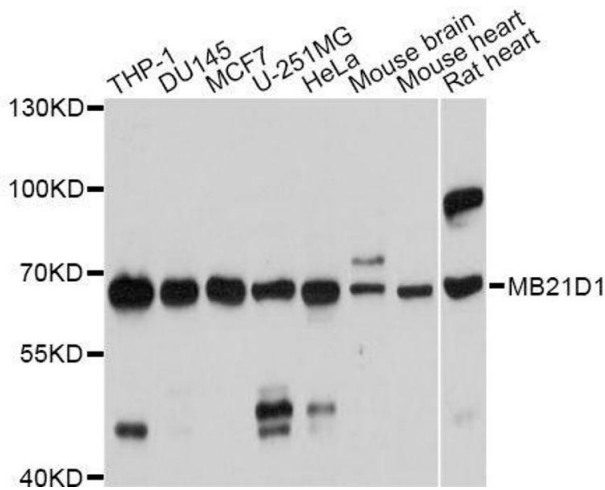
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

Images



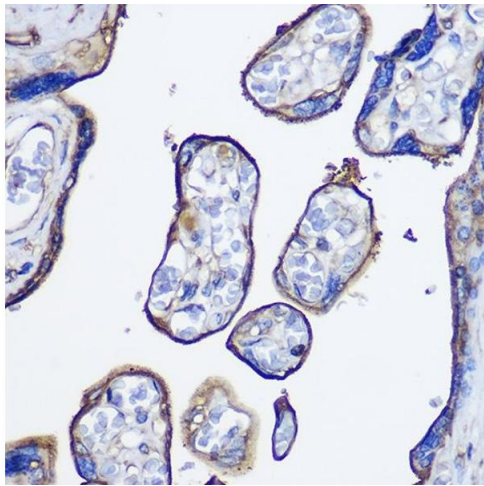
Immunofluorescence

Image 1. Immunofluorescence analysis of NIH/3T3 cells using cGAS Rabbit pAb (ABIN6134073, ABIN6143590, ABIN6143591 and ABIN6224360) at dilution of 1:50 (40x lens). Blue: DAPI for nuclear staining.



Western Blotting

Image 2. Western blot analysis of extracts of various cell lines, using MB21D1 antibody.



Immunohistochemistry

Image 3. Immunohistochemistry of paraffin-embedded human colon carcinoma using cGAS Rabbit pAb (ABIN6134073, ABIN6143590, ABIN6143591 and ABIN6224360) at dilution of 1:50 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

Please check the [product details page](#) for more images. Overall 7 images are available for ABIN6143590.