

ARG40252 anti-TET2 antibody

Package: 100 μl Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes TET2
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	lgG
Target Name	TET2
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 1833-2002 of Human TET2 (NP_001120680.1).
Conjugation	Un-conjugated
Alternate Names	MDS; KIAA1546; EC 1.14.11.n2; Methylcytosine dioxygenase TET2

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	A431	
Observed Size	~ 220 kDa	

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

Gene Symbol	TET2
Gene Full Name	tet methylcytosine dioxygenase 2
Background	The protein encoded by this gene is a methylcytosine dioxygenase that catalyzes the conversion of methylcytosine to 5-hydroxymethylcytosine. The encoded protein is involved in myelopoiesis, and defects in this gene have been associated with several myeloproliferative disorders. Two variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2011]
Function	Dioxygenase that catalyzes the conversion of the modified genomic base 5-methylcytosine (5mC) into 5-hydroxymethylcytosine (5hmC) and plays a key role in active DNA demethylation. Has a preference for 5-hydroxymethylcytosine in CpG motifs. Also mediates subsequent conversion of 5hmC into 5-formylcytosine (5fC), and conversion of 5fC to 5-carboxylcytosine (5caC). Conversion of 5mC into 5hmC, 5fC and 5caC probably constitutes the first step in cytosine demethylation. Methylation at the C5 position of cytosine bases is an epigenetic modification of the mammalian genome which plays an important role in transcriptional regulation. In addition to its role in DNA demethylation, also involved in the recruitment of the O-GlcNAc transferase OGT to CpG-rich transcription start sites of active genes, thereby promoting histone H2B GlcNAcylation by OGT. [UniProt]
Calculated Mw	224 kDa
PTM	May be glycosylated. It is unclear whether interaction with OGT leads to GlcNAcylation. According to a report, it is not GlcNAcylated by OGT (PubMed:23353889). In contrast, another group reports GlcNAcylation by OGT in mouse ortholog. [UniProt]

Images



ARG40252 anti-TET2 antibody WB image

Western blot: 25 μg of A431 cell lysate stained with ARG40252 anti-TET2 antibody at 1:1000 dilution.



ARG40252 anti-TET2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer stained with ARG40252 anti-TET2 antibody at 1:100 dilution.