10320 Camino Santa Fe, Suite G
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# Anti-TET2 (RABBIT) Antibody

**TET2 Antibody**
**Catalog # ASR3759**

## Specification

### Anti-TET2 (RABBIT) Antibody - Product Information

| | |
|---|---|
| Host | **Rabbit** |
| Conjugate | **Unconjugated** |
| Target Species | **Human** |
| Reactivity | **Human** |
| Clonality | **Polyclonal** |
| Application | **WB, E, I, LCI** |
| Application Note | **Tet2 antibody has been tested by Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect band at ~230kDa and ~150kDa (isoforms). This antibody is suitable for use by ELISA.** |
| Physical State | **Liquid (sterile filtered)** |
| Buffer | **0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2** |
| Immunogen | **TET2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a human TET-2 domain containing the N-terminal 156 amino acids of the protein.** |
| Preservative | **0.01% (w/v) Sodium Azide** |

### Anti-TET2 (RABBIT) Antibody - Additional Information

**Gene ID** 54790

**Other Names**
54790

**Purity**
Anti-TET2 Antibody was prepared from whole rabbit antiserum by delipidation and defibrination. The antiserum was further cross-absorbed against MBP by chromatography. It is directed against, and shows specific reactivity for human Tet2 protein. Cross reactivity with Tet1 and Tet3 has not been determined.

**Storage Condition**
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note**
This product is for research use only and is not intended for therapeutic or diagnostic applications.

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## Anti-TET2 (RABBIT) Antibody - Protein Information

**Name** TET2

**Synonyms** KIAA1546

**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.

**Cellular Location**
Nucleus. Chromosome. Note=Localization to chromatin depends upon monoubiquitination at Lys-1299.

**Tissue Location**
Broadly expressed. Highly expressed in hematopoietic cells; highest expression observed in granulocytes Expression is reduced in granulocytes from peripheral blood of patients affected by myelodysplastic syndromes.

## Anti-TET2 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-TET2 (RABBIT) Antibody - Images

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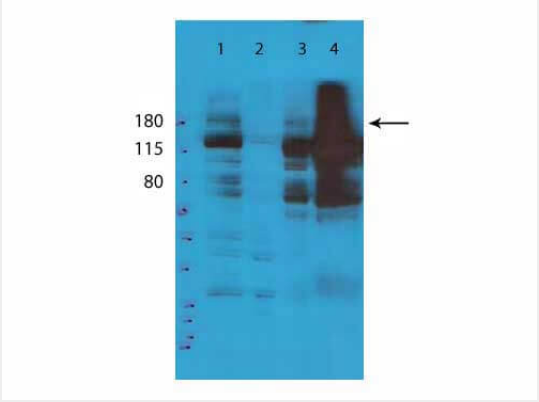


Western Blot of Rabbit Anti-Tet2 Antibody. Lane 1: Whole Cell Extract. Lane 2: Cytosolic Extract. Lane 3: Nuclear Extract. Lane 4: Chromatin Fraction. Load: 35 µg per lane of HEK293T. Primary antibody: TET2 antibody at 1:5000 for 5 hours at room temperature. Secondary antibody: HRP rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~230 and ~150kDa. Other band(s): nonspecific.

**Anti-TET2 (RABBIT) Antibody - Background**

Tet2 antibody is a dioxygenase enzyme which is associated with the addition of the hydroxyl group to 5-methylcystosine (5mC) to form 5-hydroxymethylcystosine. Tet2 mediates the formation of 5-formylcystosine from 5hmC and subsequently 5fC to 5-carboxylcystosine, and consequently Tet2 plays an active role in catalyzing those conversions which have been suggested as the first step for active mammalian DNA de-methylation. Tet2 enzyme aids in the epigenetic modification of mammalian cystosine bases, ultimately affecting transcriptional regulation. Additionally methylcystosine dioxygenase Tet2 recruits O-GlcNAc transferase OGT enzyme to CpG-rich transcription start sites of the gene, encouraging H2B GlcNAcylation by OGT. Anti-TET2 antibodies are ideal for researchers interested in Epigenetics, Cancer, Chromatin Research and Histone research.