

## Mouse anti-Human MTHFD1 Monoclonal Antibody | anti-MTHFD1 antibody

MTHFD1 Mouse mAb

| CATALOG # | HOST  | REACTIVITY | APPLICATIONS                                                        |
|-----------|-------|------------|---------------------------------------------------------------------|
| AAA62387  | Mouse | Human      | Flow Cytometry, Functional Assay, Immunoprecipitation, Western Blot |

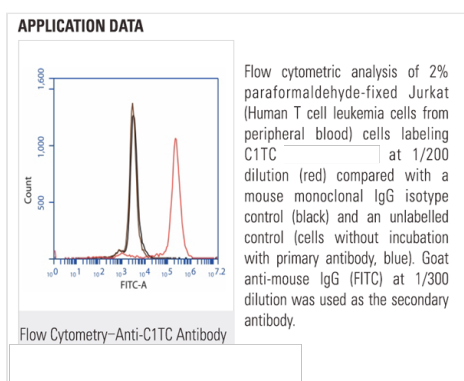
### PRODUCT SYNONYMS

MTHFD1; Monoclonal Antibody; MTHFD1 Mouse mAb; 5; 10-methylenetetrahydrofolate dehydrogenase; 10-methylenetetrahydrofolate cyclohydrolase; 10-formyltetrahydrofolate synthetase; C-1-tetrahydrofolate synthase; cytoplasmic; C1-THF synthase; cytoplasmic C-1-tetrahydrofolate synthase; methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1; methenyltetrahydrofolate cyclohydrolase; formyltetrahydrofolate synthetase; methylenetetrahydrofolate dehydrogenase (NADP+ dependent); methenyltetrahydrofolate; MTHFC; MTHFD; NADP-dependent cyclohydrolase/formyltetrahydrofolate synthetase; anti-MTHFD1 antibody

### PRODUCT SPECIFICATIONS

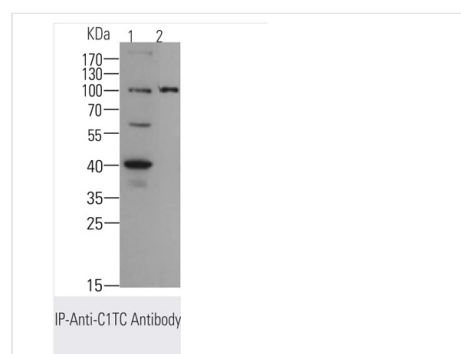
|                                                  |                                                                                                                                                    |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                             | Mouse                                                                                                                                              |
| Reactivity                                       | Human                                                                                                                                              |
| Clonality                                        | Monoclonal                                                                                                                                         |
| Isotype                                          | IgG                                                                                                                                                |
| Sequence Length                                  | 935                                                                                                                                                |
| Applicable Applications for anti-MTHFD1 antibody | FCM/FACS (Flow Cytometry), IP (Immunoprecipitation), WB (Western Blot)                                                                             |
| Source Note                                      | This monoclonal antibody is produced by immunizing mice with a sythetic peptide(KLH coupled)corresponding to amino-terminal residues of human C1TC |
| Preparation and Storage                          | Store at -20 degree C. Stable for one year from the date of shipment.                                                                              |

### IMAGES



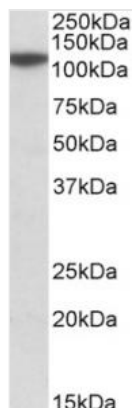
#### FCM/FACS (Flow Cytometry)

Flow cytometric analysis of 2% paraformaldehyde-fixed Jurkat (Human T cell leukemia cells from peripheral blood) cells labeling C1TC with M25094 at 1/200 dilution (red) compared with a mouse monoclonal IgG isotype control (black) and an unlabelled control (cells without incubation with primary antibody, blue). Goat anti-mouse IgG (FITC) at 1/300 dilution was used as the secondary antibody.



#### IP (Immunoprecipitation)

C1TC was immunoprecipitated from 1mg of Jurkat cells membrane fraction, blotted with M25094 of 10 ug. Western blot was performed from the immunoprecipitate using M25094 at 1/1000 dilution. Anti-Mouse-IgG(HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/10000 dilution. Lane 1: Jurkat cells membrane fraction. Lane2: IP product of Jurkat cells membrane fraction.Predicted band size : 101 KDaObserved band size : 101 KDaBlocking and dilution buffer and concentration:5% milk/TBST.



WB (Western Blot)

### ADDITIONAL INFORMATION

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-MTHFD1 antibody | This gene encodes a protein that possesses three distinct enzymatic activities, 5, 10-methylenetetrahydrofolate dehydrogenase, 5, 10-methenyltetrahydrofolate cyclohydrolase and 10-formyltetrahydrofolate synthetase. Each of these activities catalyzes one of three sequential reactions in the interconversion of 1-carbon derivatives of tetrahydrofolate, which are substrates for methionine, thymidylate, and de novo purine syntheses. The trifunctional enzymatic activities are conferred by two major domains, an aminoterminal portion containing the dehydrogenase and cyclohydrolase activities and a larger synthetase domain. |
| Product Categories/Family for anti-MTHFD1 antibody   | Cell Marker; Subcellular Marker; Membrane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

### NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                 |
|----------------------------------|-------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 222136639                                                                                       |
| NCBI GeneID                      | 4522                                                                                            |
| NCBI Accession #                 | NP_005947.3                                                                                     |
| NCBI GenBank Nucleotide #        | NM_005956.4                                                                                     |
| UniProt Accession #              | P11586; Q86VC9; Q9BVP5; B2R5Y2; G3V2B8                                                          |
| Molecular Weight                 | Predicted MW: 101kDa                                                                            |
| NCBI Official Full Name          | C-1-tetrahydrofolate synthase, cytoplasmic isoform 1                                            |
| NCBI Official Synonym Full Names | methylenetetrahydrofolate dehydrogenase, cyclohydrolase and formyltetrahydrofolate synthetase 1 |
| NCBI Official Symbol             | MTHFD1                                                                                          |
| NCBI Official Synonym Symbols    | CIMAH; MTHFC; MTHFD                                                                             |
| NCBI Protein Information         | C-1-tetrahydrofolate synthase, cytoplasmic                                                      |
| UniProt Protein Name             | C-1-tetrahydrofolate synthase, cytoplasmic                                                      |
| UniProt Gene Name                | <b>MTHFD1</b>                                                                                   |
| UniProt Synonym Gene Names       | MTHFC; MTHFD; C1-THF synthase                                                                   |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.