

# MTHFD2 Monoclonal antibody, PBS Only

Catalog Number: 68524-1-PBS

## Basic Information

**Catalog Number:**

68524-1-PBS

**Size:**

1 mg/ml

**Source:**

Mouse

**Isotype:**

IgG2a

**Immunogen Catalog Number:**

AG33605

**GenBank Accession Number:**

BC017054

**GeneID (NCBI):**

10797

**UNIPROT ID:**

P13995

**Full Name:**

methylenetetrahydrofolate  
dehydrogenase (NADP+ dependent) 2,  
methenyltetrahydrofolate  
cyclohydrolase

**Calculated MW:**

350 aa, 38 kDa

**Observed MW:**

33-38 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

1B4B6

## Applications

**Tested Applications:**

WB, Indirect ELISA, IHC

**Species Specificity:**

Human, Mouse

## Background Information

Methylenetetrahydrofolate dehydrogenase 2 (MTHFD2) is a folate-coupled mitochondrial metabolic enzyme characterized by methylenetetrahydrofolate dehydrogenase and cyclohydrolase activity. It was demonstrated that suppression of MTHFD2 inhibits methylation reactions, decreases protein synthesis and disrupts redox homeostasis, which may ultimately result in significant changes in cellular metabolic phenotype. MTHFD2 is reported to be up-regulated in various tumours, such as lung adenocarcinoma (PMID: 34121323) and breast cancer (PMID: 34007312).

## Storage

**Storage:**

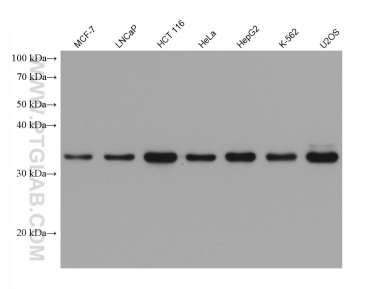
Store at -80°C.

**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

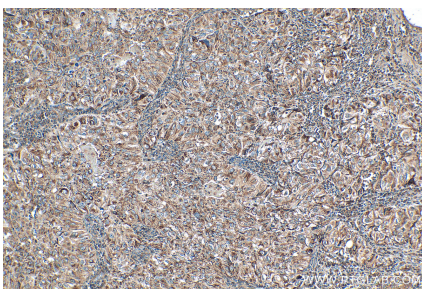
**Storage Buffer:**

PBS Only

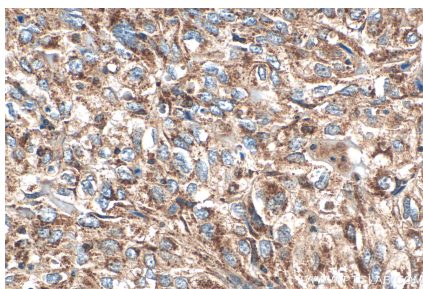
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68524-1-Ig (MTHFD2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68524-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 68524-1-Ig (MTHFD2 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68524-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 68524-1-Ig (MTHFD2 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68524-1-PBS in a different storage buffer formulation.