

## Product datasheet for **CF500543**

### DHFR Mouse Monoclonal Antibody [Clone ID: OTI6G7]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI6G7
Applications:	IF, IHC, WB
Recommended Dilution:	WB 1:2000 IHC 1:50 IF 1:100
Reactivity:	Human, Monkey, Dog, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full-length protein expressed in 293T cell transfected with human DHFR expression vector
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	21.5 kDa
Gene Name:	dihydrofolate reductase
Database Link:	<a href="#">NP_000782</a> <a href="#">Entrez Gene 13361 Mouse</a> <a href="#">Entrez Gene 24312 Rat</a> <a href="#">Entrez Gene 479165 Dog</a> <a href="#">Entrez Gene 711268 Monkey</a> <a href="#">Entrez Gene 1719 Human</a> <a href="#">P00374</a>



[View online »](#)

**Background:**

Dihydrofolate reductase converts dihydrofolate into tetrahydrofolate, a methyl group shuttle required for the de novo synthesis of purines, thymidylic acid, and certain amino acids. While the functional dihydrofolate reductase gene has been mapped to chromosome 5, multiple intronless processed pseudogenes or dihydrofolate reductase-like genes have been identified on separate chromosomes. Dihydrofolate reductase deficiency has been linked to megaloblastic anemia.

**Synonyms:**

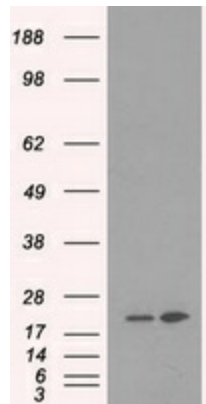
DHFRP1; DYR

**Protein Families:**

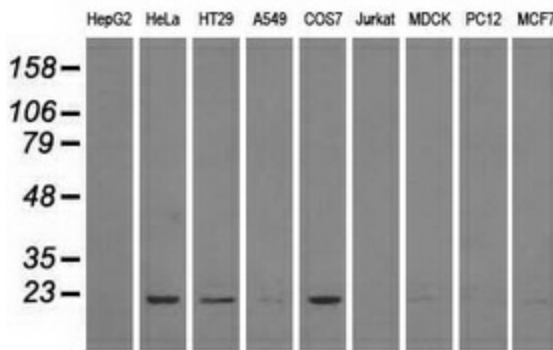
Druggable Genome, Stem cell - Pluripotency

**Protein Pathways:**

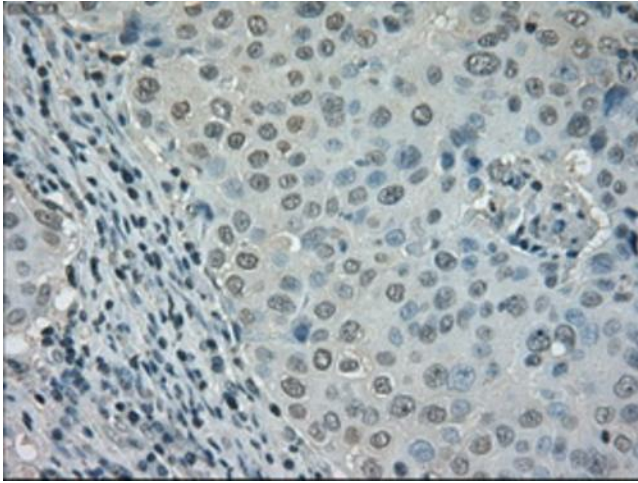
Folate biosynthesis, Metabolic pathways, One carbon pool by folate

**Product images:**


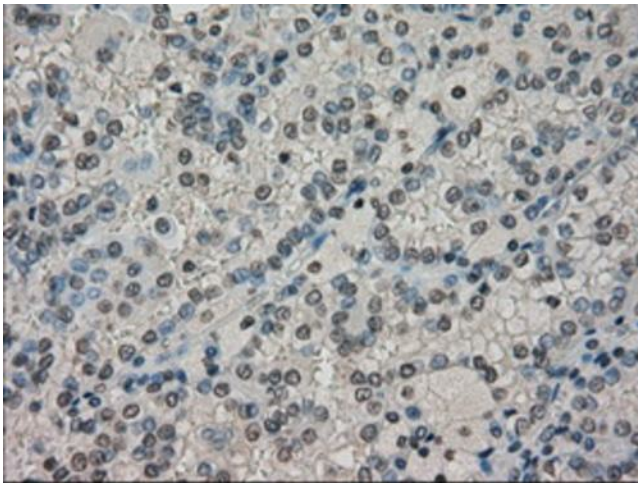
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY DHFR ([RC200089], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DHFR. Positive lysates [LY400271] (100ug) and [LC400271] (20ug) can be purchased separately from OriGene.



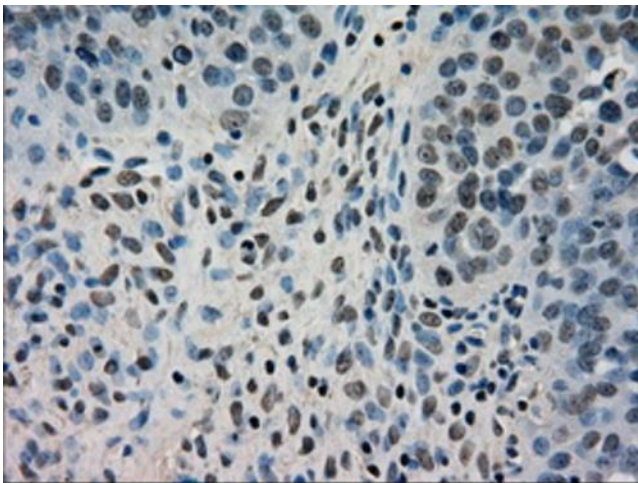
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-DHFR monoclonal antibody.



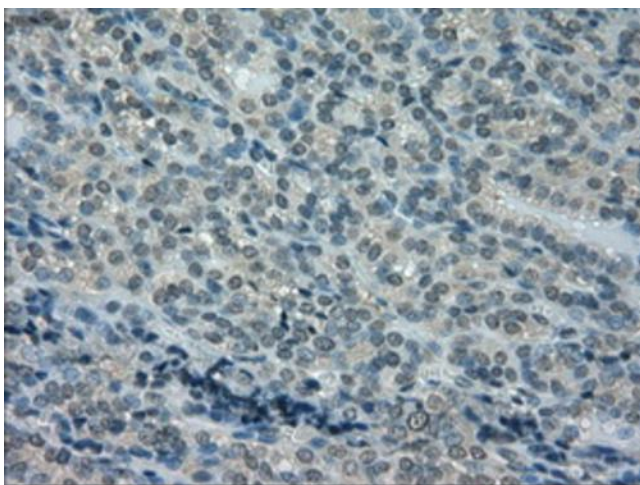
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of breast tissue using anti-DHFR mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



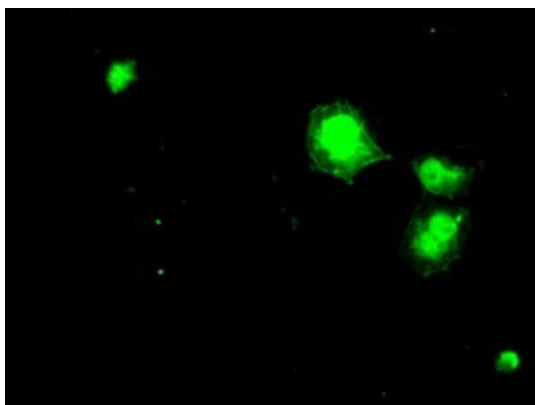
Immunohistochemical staining of paraffin-embedded Carcinoma of kidney tissue using anti-DHFR mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Adenocarcinoma of ovary tissue using anti-DHFR mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Carcinoma of thyroid tissue using anti-DHFR mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Anti-DHFR mouse monoclonal antibody ([TA500543]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY DHFR ([RC200089]).