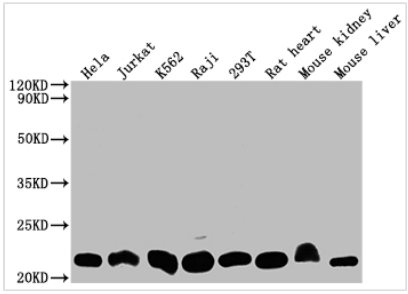
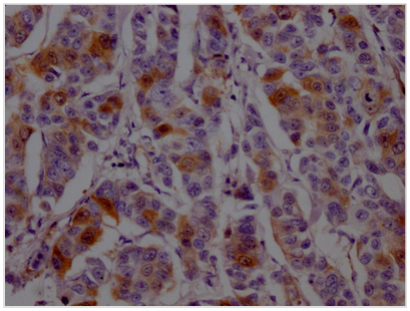
DHFR Antibody

Product Code	CSB-RA264582A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P00374
Immunogen	A synthesized peptide derived from human DHFR
Species Reactivity	Human, Mouse, Rat
Tested Applications	ELISA, WB, IHC, IP; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IP:1:200-1:1000
Relevance	Key enzyme in folate metabolism. Contributes to the de novo mitochondrial thymidylate biosynthesis pathway. Catalyzes an essential reaction for de novo glycine and purine synthesis, and for DNA precursor synthesis. Binds its own mRNA and that of DHFR2.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cell biology; Metabolism; Signal transduction
Gene Names	DHFR
Accession NO.	9B2

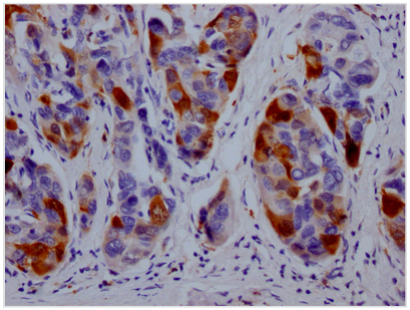
Image



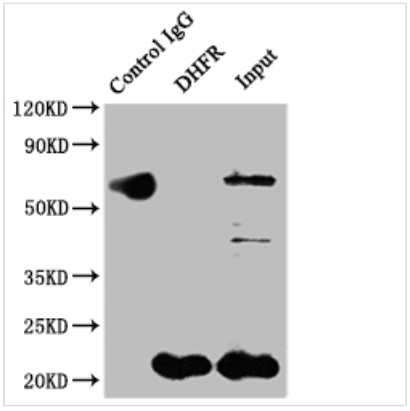
Western Blot
Positive WB detected in: Hela whole cell lysate, Jurkat whole cell lysate, K562 whole cell lysate, Raji whole cell lysate, 293T whole cell lysate, Rat heart tissue, Mouse kidney tissue, Mouse liver tissue
All lanes: DHFR antibody at 1:2000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 22, 16 kDa
Observed band size: 22 kDa



IHC image of CSB-RA264582A0HU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA264582A0HU diluted at 1:100 and staining in paraffin-embedded human liver cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunoprecipitating DHFR in Hela whole cell lysate
Lane 1: Rabbit control IgG instead of CSB-RA264582A0HU in Hela whole cell lysate. For western blotting,a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000)
Lane 2: CSB-RA264582A0HU(2μg)+ Hela whole cell lysate(500μg)
Lane 3: Hela whole cell lysate (10μg)

Description

The DNA sequence corresponding to the DHFR monoclonal antibody produced from the animals through the human DHFR synthesized peptide immunization was cloned into the expression vector, which was further transfected into a cell line for in vitro expression. The product is the recombinant DHFR monoclonal antibody. It specifically targets the DHFR from human, mouse, and rat species. It belongs to the rabbit IgG. The affinity-chromatography purification method was used to purify this DHFR antibody. This GHFR recombinant antibody has been tested by ELISA, WB, IHC, and IP to assure specificity and reactivity.

DHFR, an oxidoreductase, catalyzes the reduction of FH2acid to H4FA, thus regulating the regeneration of H4FA. DHFR has been demonstrated to react with the Hedgehog (Hh) signaling pathway negative regulator SuFu. Abnormal activation of the Hh signaling pathway is closely related to the occurrence and development of tumors. This means that DHFR knockdown and overexpression affect the proliferation and apoptosis of tumor cells.