

— A helping hand for your research

IDH1(R132H)

Catalog Number: 26081 Gene Symbol: IDH1(R132H)

Description: Anti-IDH1(R132H) Mouse Monoclonal Antibody

Background: Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. Mutations affecting Arg-132 are tissue-specific, and suggest that this residue plays a unique role in the development of high-grade gliomas. Mutations of Arg-132 to Cys, His, Leu or Ser abolish magnesium binding and abolish the conversion of isocitrate to alpha-ketoglutarate. Instead, alpha-ketoglutarate is converted to R--2-hydroxyglutarate. Elevated levels of R-2-hydroxyglutarate are correlated with an elevated risk of malignant brain tumors.

Immunogen: A synthetic peptide from the internal region of IDH1 which includes the mutation of R132H, human origin.

Tested applications: ELISA, WB, IHC

Recommended dilutions:

ELISA: 1:1000-1:5000 WB: 1:100-1:1000 IHC: 1:50-1:100 Concentration: 1 mg/ml

Host: Mouse

Clonality: Monoclonal

Purity: Purified from ascites

Format: Liquid **Storage buffer:** Preservative: no

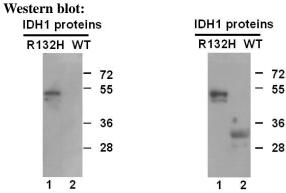
Constituents: PBS (without Mg²⁺ and Ca²⁺), pH

7.4, 150 mM NaCl, 50% glycerol

Species Reactivity: Anti-IDH1(R132H) antibody

recognizes IDH1(R132H) of vertebrates. **Storage Conditions:** Store at $-20 \, \text{°C}$. Avoid

freeze / thaw cycles



WB: Anti-IDH1(R132H) mAb WB: Anti-IDH1 mAb

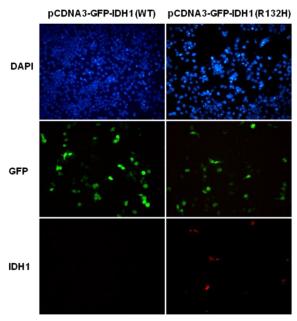
Western blot analysis of recombinant IDH1(R132H) and wildtype proteins. Purified His-tagged IDH1 (R132H) protein (Cat. #10199) and wild-type protein (Cat. #10198) were blotted with anti-IDH1(R132H) mouse antibody (Cat.# 26081)(Left panel). Proteins loading were blotted with anti-IDH1 mouse antibody (Cat. #26136, right panel).

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Immunofluorescence:



Immunofluorescence of cells expressing IDH1 proteins with anti-IDH1(R132H) antibody.

HEK293T cells were transfected with pCDNA3-GFP-IDH1 (WT) plasmid (left column) or pCDNA3-GFP-IDH1 (R132H) plasmid (right column), then fixed and stained with anti-IDH1 (R132H) monoclonal antibody (Cat. #26081).



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IDH2(R172H)

Catalog Number: 26084 Gene Symbol: IDH2(R172H)

Description: Anti-IDH2(R172H) Mouse Monoclonal Antibody

Background: Isocitrate dehydrogenase (IDH) catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. The isocitrate and isopropylmalate dehydrogenases family has three members, IDH1, IDH2 and IDH3. IDH2 plays a role in intermediary metabolism and energy production. Defects in IDH2 are the cause of D-2-hydroxyglutaric aciduria type 2 (D2HGA2). Somatic mosaic mutations of this protein have also been found associated to Ollier disease and Maffucci syndrome., and R172H IDH2 mutations do exist in diffusely infiltrative gliomas.

Immunogen: A synthetic peptide from the internal region of IDH2 which includes the mutation of R172H, human origin.

Tested applications: ELISA, WB, IHC

Recommended dilutions:

ELISA: 1:1000-1:5000
WB: 1:100-1:1000
IHC: 1:50-1:100
IF: 1:50-1:100
Concentration: 1 mg/ml

Host: Mouse

Clonality: Monoclonal **Purity:** Purified from ascites

Format: Liquid **Storage buffer:** Preservative: no

Constituents: PBS (without Mg²⁺ and Ca²⁺), pH

7.4, 150 mM NaCl, 50% glycerol

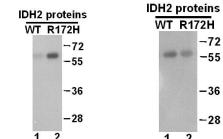
Species Reactivity: Anti-IDH2(R172H) antibody

recognizes IDH2(R172H) of vertebrates.

Storage Conditions: Store at -20 °C. Avoid

freeze / thaw cycles.

Western blot:



1 2 WB: Anti-IDH2(R172H) mAb WB: Anti-IDH2 mAb

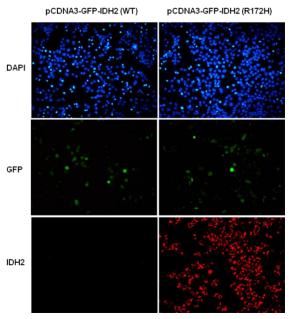
Western blot analysis of recombinant IDH2(R172H) and wildtype proteins. Purified His-tagged IDH2(R172H) protein(Cat.#10201) and wildtype protein(Cat.#10200) were blotted with anti-IDH2(R172H) monoclonal antibody(Cat.# 26084)(left panel). Proteins loading were blotted with anti-IDH2 monoclonal antibody(right panel).

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Immunofluorescence:



Immunofluorescence of cells expressing IDH2 proteins with anti-IDH2 (R172H) antibody.

HEK293T cells were transfected with pCDNA3-GFP-IDH2 (WT) plasmid (left column) or pCDNA3-GFP-IDH2 (R172H) plasmid (right column), then fixed and stained with anti-IDH2 (R172H) monoclonal antibody (Cat. #26084).



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IDH1 (R132S)

Catalog Number: 26160

Gene Symbol: IDH1; IDCD; IDH; IDP; IDPC; PICD

Description: Anti-IDH1 (R132S) Mouse Monoclonal Antibody

Background: Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. Mutations affecting Arg-132 are tissue-specific, and suggest that this residue plays a unique role in the development of high-grade gliomas. Mutations of Arg-132 to Cys, His, Leu or Ser abolish magnesium binding and abolish the conversion of isocitrate to alpha-ketoglutarate. Instead, alpha-ketoglutarate is converted to R-2-hydroxyglutarate. Elevated levels of R-2-hydroxyglutarate are correlated with an elevated risk of malignant brain tumors.

Immunogen: A synthetic peptide from the internal region of IDH1 which includes the mutation of R132S, human origin.

Tested applications: ELISA, WB, IHC

Recommended dilutions:

ELISA: 1:1000-1:5000 WB: 1:500-1:1000 IHC: 1:50-1:100 Concentration: 1 mg/ml

Host: Mouse

Clonality: Monoclonal **Purity:** Purified from ascites

Format: Liquid
Storage buffer:
Preservative: no

Constituents: PBS (without Mg²⁺ and Ca²⁺), pH

7.4, 150 mM NaCl, 50% glycerol

Species Reactivity: Recognizes IDH1 (R132S) mutated prteein, but not wild-type IDH1 of

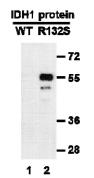
vertebrates.

Storage Conditions: Store at -20°C. Avoid

freeze / thaw cycles

Western blot:

#26160).



WB: anti-IDH1(R132S) mAb

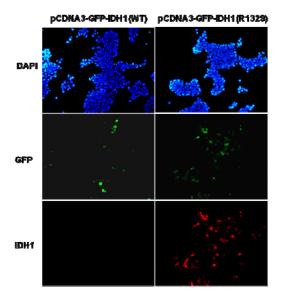
Western blot analysis of recombinant IDH1 (R132S) and wild-type proteins. Purified His-tagged IDH1 (R132S) protein (lane 2) and wild-type protein (lane 1) were blotted with anti-IDH1 (R132S) mouse antibody (Cat.

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Immunofluorescence:



Immunofluorescence of cells expressing IDH1 proteins with anti-IDH1 (R132S) antibody.

HEK293T cells were transfected with pCDNA3-GFP-IDH1 (WT) plasmid (left column) or pCDNA3-GFP-IDH1 (R132S) plasmid (right column), then fixed and stained with anti-IDH1 (R132S) monoclonal antibody (Cat. #26160).



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IDH2 (R172K)

Catalog Number: 26163

Gene Symbol: IDH2; D2HGA2; ICD-M; IDH; IDHM; IDP; IDPM; mNADP-IDH

Description: Anti-IDH2 (R172K) Mouse Monoclonal Antibody

Background: Isocitrate dehydrogenase (IDH) catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. The isocitrate and isopropylmalate dehydrogenases family has three members, IDH1, IDH2 and IDH3. IDH2 plays a role in intermediary metabolism and energy production. Defects in IDH2 are the cause of D-2-hydroxyglutaric aciduria type 2 (D2HGA2). Somatic mosaic mutations of this protein have also been found associated to Ollier disease and Maffucci syndrome, and R172K IDH2 mutations do exist in diffusely infiltrative gliomas.

Immunogen: A synthetic peptide from the internal region of IDH2 which includes the mutation of R172K, human origin.

Tested applications: ELISA, WB, IHC

Recommended dilutions:

ELISA: 1:1000-1:5000 WB: 1:100-1:1000 IHC: 1:50-1:100 **Concentration:** 1 mg/ml

Host: Mouse

Clonality: Monoclonal **Purity:** Purified from ascites

Format: Liquid **Storage buffer:** Preservative: no

Constituents: PBS (without Mg²⁺ and Ca²⁺), pH

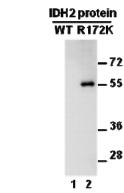
7.4, 150 mM NaCl, 50% glycerol

Species Reactivity: recognizes R172K mutant,

but not wild-type IDH2 of vertebrates. **Storage Conditions:** Store at -20°C. Avoid

freeze / thaw cycles.

Western blot:



WB: anti-IDH2(R172K) mAb

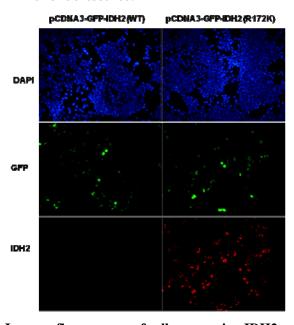
Western blot analysis of recombinant IDH2 (R172K) and wildtype proteins. Purified His-tagged IDH2 (R172K) (lane 2) and wildtype protein (lane 1) were blotted with anti-IDH2 (R172K) monoclonal antibody (Cat. #26163).

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Immunofluorescence:



Immunofluorescence of cells expressing IDH2 proteins with anti-IDH2 (R172K) antibody. HEK293T cells were transfected with pCDNA3-GFP-IDH2 (WT) plasmid (left column) or pCDNA3-GFP-IDH2 (R172K) plasmid (right column), then fixed and stained with anti-IDH2 (R172K) monoclonal antibody (Cat. #26163).



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IDH2 (R172W)

Catalog Number: 26164

Gene Symbol: IDH2 (R172W)

Description: Anti-IDH2 (R172W) Mouse Monoclonal Antibody

Background: <u>Isocitrate deh</u>ydrogenase (IDH) catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. The isocitrate and isopropylmalate dehydrogenases family has three members, IDH1, IDH2 and IDH3. IDH2 plays a role in intermediary metabolism and energy production. Defects in IDH2 are the cause of D-2-hydroxyglutaric aciduria type 2 (D2HGA2). Somatic mosaic mutations of this protein have also been found associated to Ollier disease and Maffucci syndrome, and R172W IDH2 mutations do exist in diffusely infiltrative gliomas.

Immunogen: A synthetic peptide from the internal region of IDH2 which includes the mutation of R172W, human origin.

Tested applications: ELISA, WB, IHC

Recommended dilutions:

ELISA: 1:1000-1:5000 WB: 1:100-1:1000 IHC: 1:50-1:100 Concentration: 1 mg/ml

Host: Mouse

Clonality: Monoclonal Purity: Purified from ascites

Format: Liquid Storage buffer: Preservative: no

Constituents: PBS (without Mg²⁺ and Ca²⁺), pH

7.4, 150 mM NaCl, 50% glycerol

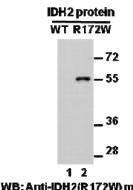
Species Reactivity: recognizes IDH1(R172W) of

vertebrates.

Storage Conditions: Store at -20°C. Avoid

freeze / thaw cycles.

Western blot:



WB: Anti-IDH2(R172W) mAb

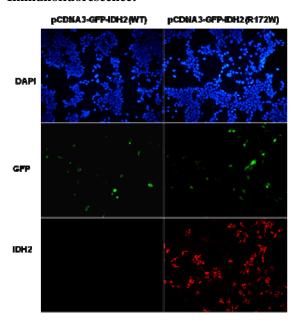
Western blot analysis of recombinant IDH2 (R172W) and wildtype proteins. Purified His-tagged IDH2 (R172W) (lane 2) and wildtype protein (lane 1) were blotted with anti-IDH2 (R172W) monoclonal antibody (Cat. #26164).

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Immunofluorescence:



Immunofluorescence of cells expressing IDH2 proteins with anti-IDH2 (R172W) antibody. HEK293T cells were transfected with pCDNA3-GFP-IDH2 (WT) plasmid (left column) or pCDNA3-GFP-IDH2 (R172W) plasmid (right column), then fixed and stained with anti-IDH2 (R172W) monoclonal antibody (Cat. #26164).



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IDH2 (R140Q)

Catalog Number: 26165

Gene Symbol: IDH2; D2HGA2; ICD-M; IDH; IDHM; IDP; IDPM; mNADP-IDH

Description: Anti-IDH2 (R140Q) Mouse Monoclonal Antibody

Background: Isocitrate dehydrogenase (IDH) catalyzes the oxidative decarboxylation of isocitrate to 2-oxoglutarate. Mutations of Arg-132 in IDH to Cys, His, Leu or Ser abolish magnesium binding and the conversion of isocitrate to alpha-ketoglutarate. Instead, alpha-ketoglutarate is converted to R-2-hydroxyglutarate. Elevated levels of R-2-hydroxyglutarate are correlated with an elevated risk of malignant brain tumors.

 $\textbf{Tested applications:} \ ELISA, WB, IHC$

Recommended dilutions:

ELISA: 1:1000-1:5000 WB: 1:500-1:1000 IHC: 1:50-1:100 Concentration: 1 mg/ml

Host: Mouse

Clonality: Monoclonal

Purity: Purified from ascites

Format: Liquid **Storage buffer:** Preservative: no

Constituents: PBS (without Mg²⁺ and Ca²⁺), pH

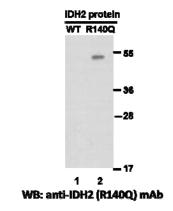
7.4, 150 mM NaCl, 50% glycerol

Species Reactivity: Recognizes R140Q mutant,

but not wild-type IDH2 of vertebrates. **Storage Conditions:** Store at -20°C. Avoid

freeze / thaw cycles.

Western blot:



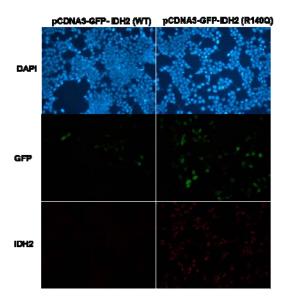
Western blot analysis of recombinant IDH2 (R140Q) and wildtype proteins. Purified His-tagged IDH2 (R140Q) protein (lane 2) and corresponding wildtype protein (lane 1) were blotted with anti-IDH2 (R140Q) monoclonal antibody (Cat. #26165).

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Immunofluorescence:



Immunofluorescence of cells expressing IDH2 proteins with anti-IDH2 (R140Q) antibody. HEK293T cells were transfected with pCDNA3-GFP-IDH2 (WT) plasmid (left column) or pCDNA3-GFP-IDH2 (R140Q) plasmid (right column), then fixed and stained with anti-IDH2 (R140Q) monoclonal antibody (Cat. #26165).



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IDH2 (R172G)

Catalog Number: 26231

Gene Symbol: IDH2; D2HGA2; ICD-M; IDH; IDHM; IDP; IDPM; mNADP-IDH

Description: Anti-IDH2 (R172G) Mouse Monoclonal Antibody

Background: Isocitrate dehydrogenase (IDH) catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. The isocitrate and isopropylmalate dehydrogenases family has three members, IDH1, IDH2 and IDH3. IDH2 plays a role in intermediary metabolism and energy production. Defects in IDH2 are the cause of D-2-hydroxyglutaric aciduria type 2 (D2HGA2). Somatic mosaic mutations of this protein have also been found associated to Ollier disease and Maffucci syndrome, and R172G IDH2 mutations do exist in diffusely infiltrative gliomas.

Immunogen: A synthetic peptide from the internal region of IDH2 which includes the mutation of R172G, human origin.

Tested applications: ELISA, WB, IHC

Recommended dilutions:

ELISA: 1:1000-1:5000 WB: 1:100-1:1000 IHC: 1:50-1:100 **Concentration:** 1 mg/ml

Host: Mouse

Clonality: Monoclonal **Purity:** Purified from ascites

Format: Liquid
Storage buffer:
Preservative: no

Constituents: PBS (without Mg²⁺ and Ca²⁺), pH

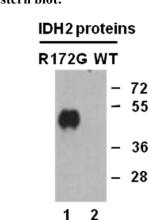
7.4, 150 mM NaCl, 50% glycerol

Species Reactivity: recognizes R172G mutant,

but not wild-type IDH2 of vertebrates. **Storage Conditions:** Store at -20°C. Avoid

freeze / thaw cycles.

Western blot:



WB: Anti-IDH2(R172G) mAb

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Web: www.neweastbio.com

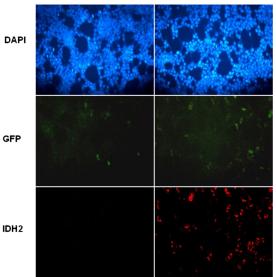
Western blot analysis of recombinant IDH2 (R172G) and wildtype proteins. Purified His-tagged IDH2 (R172G) (lane 1) and corresponding wild-type IDH2 protein (lane 2) were blotted with anti-IDH2 (R172G) monoclonal antibody (Cat. #26231).



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Immunofluorescence:





Immunofluorescence of cells expressing IDH2 proteins with anti-IDH2 (R172G) antibody.

HEK293T cells were transfected with pCDNA3-GFP-IDH2 (WT) plasmid (left column) or pCDNA3-GFP-IDH2 (R172G) plasmid (right column), then fixed and stained with anti-IDH2 (R172G) monoclonal antibody (Cat. #26231).



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IDH1 (R132P)

Catalog Number: 26406

Gene Symbol: IDH2; D2HGA2; ICD-M; IDH; IDHM; IDP; IDPM; mNADP-IDH

Description: Anti-IDH1 (R132P) Mouse Monoclonal Antibody

Background: Isocitrate dehydrogenases (IDH) catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. Mutations affecting Arg-132 are tissue-specific, and suggest that this residue plays a unique role in the development of high-grade gliomas. Mutations of Arg-132 to Cys, His, Leu or Ser abolish magnesium binding and abolish the conversion of isocitrate to alpha-ketoglutarate. Instead, alpha-ketoglutarate is converted to R-2-hydroxyglutarate. Elevated levels of R-2-hydroxyglutarate are correlated with an elevated risk of malignant brain tumors.

Immunogen: A synthetic peptide from the internal region of IDH1 which includes the mutation of R132P, human origin.

Tested applications: ELISA, WB, IHC

Recommended dilutions:

ELISA: 1:1000-1:5000 WB: 1:100-1:1000 IHC: 1:50-1:100 Concentration: 1 mg/ml

Host: Mouse

Clonality: Monoclonal **Purity:** Purified from ascites

Format: Liquid
Storage buffer:
Preservative: no

Constituents: PBS (without Mg²⁺ and Ca²⁺), pH

7.4, 150 mM NaCl, 50% glycerol

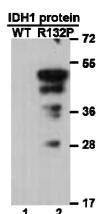
Species Reactivity: recognizes R132P mutant,

but not wild-type IDH2 of vertebrates.

Storage Conditions: Store at -20°C. Avoid

freeze / thaw cycles.

Western blot:



WB: anti-IDH1 (R132P) mAb

Western blot analysis of recombinant IDH1 (R132P) and wildtype proteins. Purified His-tagged IDH1 (R132P) (lane 1) and corresponding wild-type IDH1 protein (lane 2) were blotted with anti-IDH1 (R132P) monoclonal

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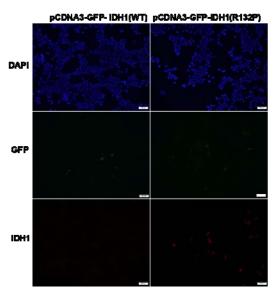
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antibody (Cat. #26406).



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Immunofluorescence:



Immunofluorescence of cells expressing IDH1 proteins with anti-IDH1 (R132P) antibody.

HEK293T cells were transfected with pCDNA3-GFP-IDH1 (WT) plasmid (left column) or pCDNA3-GFP-IDH1(R132P) plasmid (right column), then fixed and stained with anti-IDH1 (R132P) monoclonal antibody (Cat. #26406).



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IDH2 (R172S)

Catalog Number: 26408

Gene Symbol: IDH2; D2HGA2; ICD-M; IDH; IDHM; IDP; IDPM; mNADP-IDH

Description: Anti-IDH2 (R172S) Mouse Monoclonal Antibody

Background: <u>Isocitrate deh</u>ydrogenase (IDH) catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. The isocitrate and isopropylmalate dehydrogenases family has three members, IDH1, IDH2 and IDH3. IDH2 plays a role in intermediary metabolism and energy production. Defects in IDH2 are the cause of D-2-hydroxyglutaric aciduria type 2 (D2HGA2). Somatic mosaic mutations of this protein have also been found associated to Ollier disease and Maffucci syndrome, and R172S IDH2 mutations do exist in diffusely infiltrative gliomas.

Immunogen: A synthetic peptide from the internal region of IDH2 which includes the mutation of R172S, human origin.

Tested applications: ELISA, WB, IHC

Recommended dilutions:

ELISA: 1:1000-1:5000 WB: 1:100-1:1000 IHC: 1:50-1:100 Concentration: 1 mg/ml

Host: Mouse

Clonality: Monoclonal Purity: Purified from ascites

Format: Liquid Storage buffer: Preservative: no

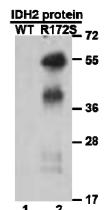
Constituents: PBS (without Mg²⁺ and Ca²⁺), pH

7.4, 150 mM NaCl, 50% glycerol

Species Reactivity: recognizes R172S mutant,

but not wild-type IDH2 of vertebrates. Storage Conditions: Store at -20°C. Avoid freeze / thaw cycles.

Western blot:



WB: anti-IDH2 (R172S) mAb

Western blot analysis of recombinant IDH2 (R172S) and wildtype proteins. Purified His-tagged IDH2 (R172S) (lane 1) and corresponding wild-type IDH2 protein (lane 2) were blotted with anti-IDH2 (R172S) monoclonal

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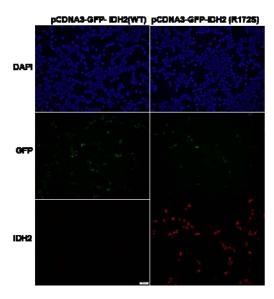
Web: www.neweastbio.com

antibody (Cat. #26408).



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Immunofluorescence:



Immunofluorescence of cells expressing IDH2 proteins with anti-IDH2 (R172S) antibody.

HEK293T cells were transfected with pCDNA3-GFP-IDH2 (WT) plasmid (left column) or pCDNA3-GFP-IDH2 (R172S) plasmid (right column), then fixed and stained with anti-IDH2 (R172S) monoclonal antibody (Cat. #26408).