

RAF1

CONTACT INFORMATION:	Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas
STATUS:	Validated
TYPE:	Rat monoclonal
CLONE NAME:	EMI411E
PROTEIN:	RAF proto-oncogene serine/threonine-protein kinase
PROTEIN WEB:	https://www.uniprot.org/uniprot/Q99N57
ANTIGEN USED:	His-RAF1 (fragment 189-353)
FUSION PARTNER:	NS1/Ag4-1 (NS1) cells
ISOTYPE:	IgG2a
SPECIES REACTIVITY:	human and mouse
PREPARATION AND STORAGE:	Aliquot and store at 4C. Do not freeze

DESCRIPTION

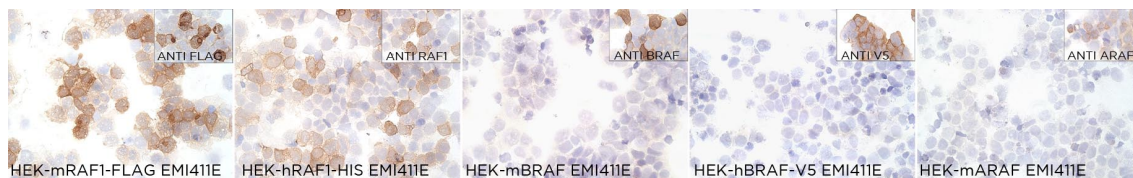
Serine/threonine-protein kinase that acts as a regulatory link between the membrane-associated Ras GTPases and the MAPK/ERK cascade, and this critical regulatory link functions as a switch determining cell fate decisions including proliferation, differentiation, apoptosis, survival and oncogenic transformation. RAF1 activation initiates a mitogen-activated protein kinase (MAPK) cascade that comprises a sequential phosphorylation of the dual-specific MAPK kinases (MAP2K1/MEK1 and MAP2K2/MEK2) and the extracellular signal-regulated kinases (MAPK3/ERK1 and MAPK1/ERK2).

APPLICATIONS

IHC Techniques	Clone	Dilution	Antibody concentration	Antigen retrieval method	Visualization kit	Positive control	Negative control	Protein localization	Positivity in other species
Frozen tissue and cytopins									
Recommended	EMI41 1E	Neat	supernatant						
Paraffin tissue									

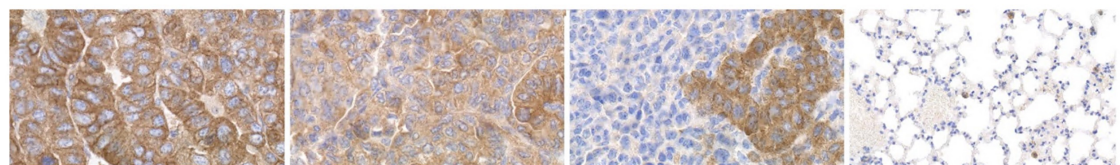
Recommended	EMI411E	Neat	supernatant					
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Immunofluorescence



EMI411E mAb is able to detect human and mouse RAF1 protein in immunocytochemistry

To confirm that EMI411E mAb recognizes human and mouse RAF1 protein and do not cross react with mA-RAF and m/hBRAF, immunocytochemistry on frozen cytospin preparations of human and mouse proteins expressed in HEK293T were performed. Anti-FLAG, RAF1, B-RAF and V5 Abs were used as positive controls.



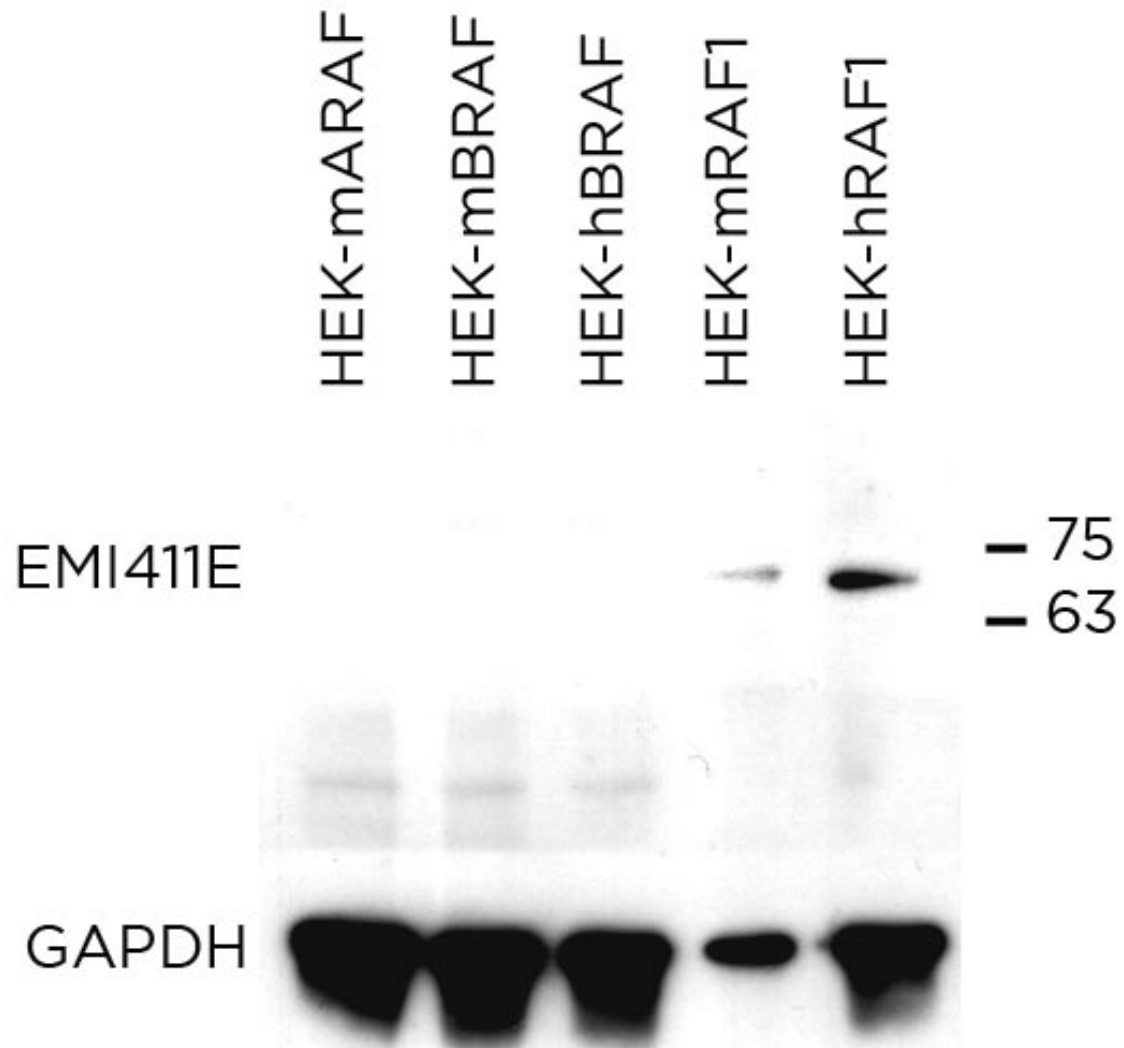
RAF1 expressing murine *Kras^{G12V}/p53^{KO}* lung adenocarcinoma

Partial genetic deletion of RAF1 expression in murine *Kras^{G12V}/p53^{KO}* lung adenocarcinoma

Normal lung tissue showing expression of RAF1 in the resident macrophages.

EMI411E mAb can be used to detect RAF1 protein in mouse paraffin tissues

WB Techniques	Clone	Dilution	Antibody concentration	Positive control	Negative control	Expected MW	Observed Mw	Positivity in other species
Western Blotting								
Recommended	EMI411E	Neat	supernatant			73kDa	73kDa	
Immunoprecipitation								



EMI411E mAb is able to detect mouse and human RAF1 protein by WB.

LANES

Lane 1 HEK-mARAF (10ug) (-)

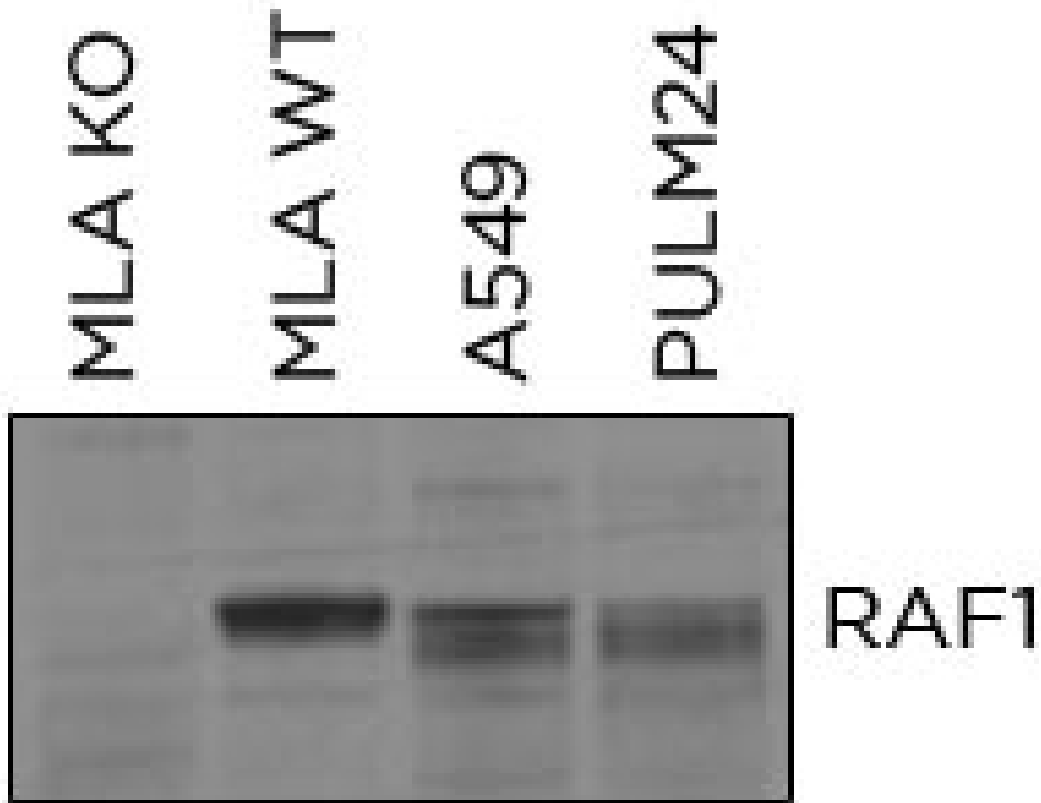
Lane 2 HEK-mBRAF (10ug) (-)

Lane 3 HEK-hBRAF (10ug) (-)

Lane 4 HEK-mRAF1 (10ug) (+)

Lane 5 HEK-hRAF1 (10ug) (+)

GAPDH was used as loading control



EMI411E mAb is able to detect mouse and human RAF1 protein by WB.

LANES

Lane 1 mouse Lung Adenocarcinoma RAF1 KO (20ug) (-)

Lane 2 mouse Lung Adenocarcinoma RAF1 WT (20ug) (+)

Lane 3 human A549 (RAF1 WT) (20ug) (+)

Lane 4 human PULM24 (RAF1 WT) (20ug) (+)