



# K-Ras Rabbit mAb

<b>Catalog No</b>	YP-rAb-17022
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human,Mouse,Rat
<b>Applications</b>	WB,IHC,IF,ELISA
<b>Gene Name</b>	KRAS
<b>Protein Name</b>	v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog
<b>Purification Process</b>	Protein A
<b>Specificity</b>	Endogenous
<b>Formulation</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source</b>	Monoclonal, Rabbit,IgG
<b>Dilution</b>	IHC 1:100-1:500; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
<b>Concentration</b>	0.5 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-15° C to -25° C/1 year(Do not lower than -25° C)
<b>Synonyms</b>	GTPase KRas ; K-Ras 2 ; Ki-Ras ; c-K-ras ; c-Ki-ras ;
<b>Observed Band</b>	22kD
<b>Calculated Molecular Weight</b>	22kD
<b>Cell Pathway</b>	Cell membrane ; Lipid-anchor ; Cytoplasmic side . Endomembrane system . Cytoplasm, cytosol .; [Isoform 2B]: Cell membrane ; Lipid-anchor .
<b>Tissue Specificity</b>	Brain,Cervix carcinoma,Colon carcinoma,Gallbladder tumor,Lung,Lung carcinom
<b>Function</b>	Alternative products:Isoforms differ in the C-terminal region which is encoded by two alternative exons (IVA and IVB),Disease:Defects in KRAS are a cause of acute myelogenous leukemia (AML) [MIM:601626]. AML is a malignant disease in which hematopoietic precursors are arrested in an early stage of development.,Disease:Defects in KRAS are a cause of cardiofaciocutaneous syndrome (CFC syndrome) [MIM:115150]; also known as cardio-facio-cutaneous syndrome. CFC syndrome is characterized by a distinctive facial appearance, heart defects and mental retardation. Heart defects include pulmonic stenosis, atrial septal defects and hypertrophic cardiomyopathy. Some affected individuals present with ectodermal abnormalities such as sparse, friable hair, hyperkeratotic skin lesions and a generalized ichthyosis-like condition. Typical facial features are similar to Noonan syndrome. They include high forehead with bitemporal constriction, hypoplastic supraorbital ridges, downslanting palpebral fissures, a





depressed nasal bridge, and posteriorly angulated ears with prominent helices. The inheritance of CFC syndrome is autosomal dominant. Disease: Defects in KRAS are a cause of juvenile myelomonocytic leukemia (JMML) [MIM:607785]. JMML is a pediatric myelodysplastic syndrome that constitutes approximately 30% of childhood cases of myelodysplastic syndrome (MDS) and 2% of leukemia. It is characterized by leukocytosis with tissue infiltration and in vitro hypersensitivity of myeloid progenitors to granulocyte-macrophage colony stimulating factor. Disease: Defects in KRAS are the cause of Noonan syndrome 3 (NS3) [MIM:609942]. Noonan syndrome (NS) [MIM:163950] is a disorder characterized by dysmorphic facial features, short stature, hypertelorism, cardiac anomalies, deafness, motor delay, and a bleeding diathesis. It is a genetically heterogeneous and relatively common syndrome, with an estimated incidence of 1 in 1000-2500 live births. Rarely, NS is associated with juvenile myelomonocytic leukemia (JMML). NS3 inheritance is autosomal dominant. Disease: KRAS mutations are involved in cancer development. enzyme regulation: Alternate between an inactive form bound to GDP and an active form bound to GTP. Activated by a guanine nucleotide-exchange factor (GEF) and inactivated by a GTPase-activating protein (GAP). Function: Ras proteins bind GDP/GTP and possess intrinsic GTPase activity. online information: The Singapore human mutation and polymorphism database, similarity: Belongs to the small GTPase superfamily. Ras family. subunit: Interacts with PHLPP.

### Background

This gene, a Kirsten ras oncogene homolog from the mammalian ras gene family, encodes a protein that is a member of the small GTPase superfamily. A single amino acid substitution is responsible for an activating mutation. The transforming protein that results is implicated in various malignancies, including lung adenocarcinoma, mucinous adenoma, ductal carcinoma of the pancreas and colorectal carcinoma. Alternative splicing leads to variants encoding two isoforms that differ in the C-terminal region. [provided by RefSeq, Jul 2008],

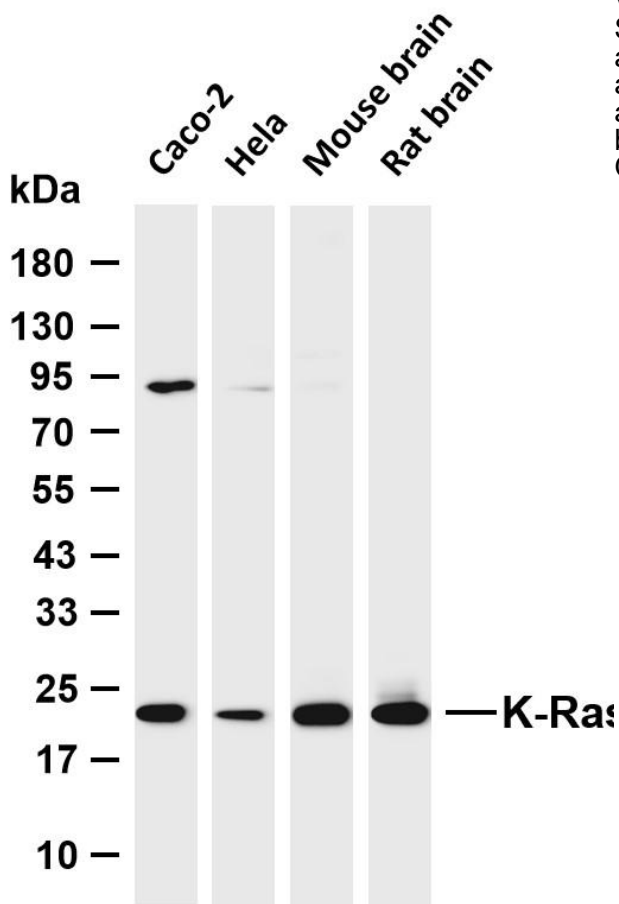
### matters needing attention

Avoid repeated freezing and thawing!

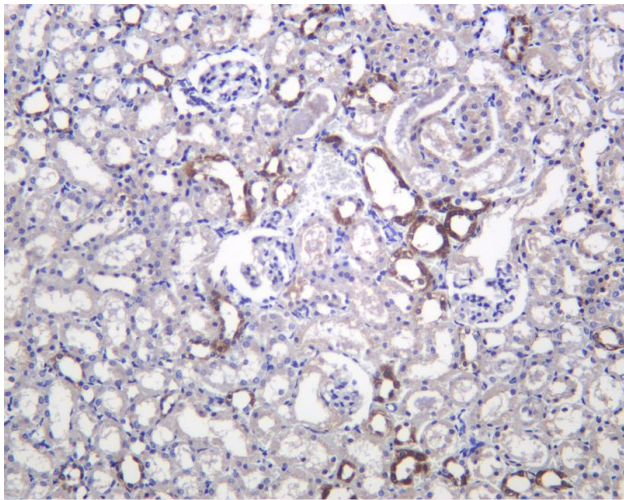
### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.





Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-K-Ras antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Caco-2 Lane 2: HeLa Lane 3: Mouse brain Lane 4: Rat brain Predicted band size: 22kDa Observed band size: 22kDa



Rat kidney was stained with anti-K-Ras Rabbit antibody

