

Product datasheet

Recombinant Raf1 (mutated Y340E + Y341E) protein (Active) ab62292

[2 Images](#)

Description

| | |
|-----------------------------------|--|
| Product name | Recombinant Raf1 (mutated Y340E + Y341E) protein (Active) |
| Biological activity | The specific activity of RAF1 was determined to be ~6,000 nmol/min/mg in a coupled assay as per antibody assay protocol. |
| Purity | > 80 % SDS-PAGE. Purity >80% as determined by SDS-PAGE and Coomassie blue staining. Affinity purified. |
| Expression system | Baculovirus infected Sf9 cells |
| Accession | <u>P04049-1</u> |
| Protein length | Protein fragment |
| Animal free | No |
| Nature | Recombinant |
| Predicted molecular weight | 63 kDa including tags |
| Amino acids | 306 to 648 |
| Modifications | mutated Y340E + Y341E |
| Tags | GST tag N-Terminus |

Specifications

Our **Abpromise guarantee** covers the use of **ab62292** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| | |
|---------------------|------------------------------------|
| Applications | Western blot Functional Studies |
|---------------------|------------------------------------|

| | |
|-------------|--------|
| Form | Liquid |
|-------------|--------|

Preparation and Storage

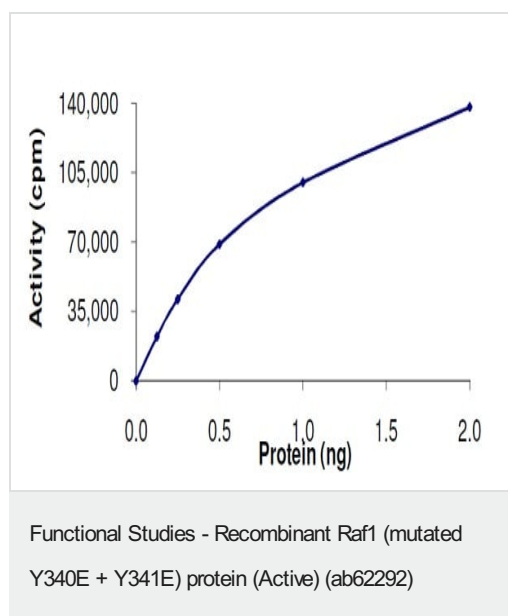
| | |
|------------------------------|---|
| Stability and Storage | Shipped at 4°C. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. pH: 7.50 Constituents: 0.00385% DTT, 0.79% Tris HCl, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride, 0.31% Glutathione, 0.0029% EDTA, 0.0017% PMSF |
|------------------------------|---|

This product is an active protein and may elicit a biological response in vivo, handle with caution.

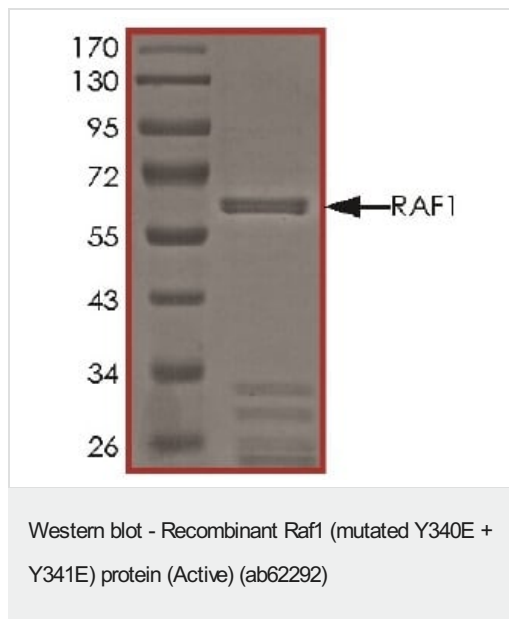
General Info

| | |
|---|---|
| Function | Involved in the transduction of mitogenic signals from the cell membrane to the nucleus. Part of the Ras-dependent signaling pathway from receptors to the nucleus. Protects cells from apoptosis mediated by STK3. |
| Tissue specificity | In skeletal muscle, isoform 1 is more abundant than isoform 2. |
| Involvement in disease | <p>Defects in RAF1 are the cause of Noonan syndrome type 5 (NS5) [MIM:611553]. Noonan syndrome (NS) 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.</p> <p>Defects in RAF1 are the cause of LEOPARD syndrome type 2 (LEOPARD2) [MIM:611554]. LEOPARD syndrome is an autosomal dominant disorder allelic with Noonan syndrome. The acronym LEOPARD stands for lentigines, electrocardiographic conduction abnormalities, ocular hypertelorism, pulmonic stenosis, abnormalities of genitalia, retardation of growth, and deafness.</p> |
| Sequence similarities | <p>Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. RAF subfamily.</p> <p>Contains 1 phorbol-ester/DAG-type zinc finger.</p> <p>Contains 1 protein kinase domain.</p> <p>Contains 1 RBD (Ras-binding) domain.</p> |
| Post-translational modifications | Phosphorylated upon DNA damage, probably by ATM or ATR. Phosphorylation at Thr-269 increases its kinase activity. Phosphorylation at Ser-259 induces the interaction with YWHAZ and inactivates kinase activity. Dephosphorylation of Ser-259 by the complex containing protein phosphatase 1, SHOC2 and M-Ras/MRAS relieves inactivation, leading to stimulate RAF1 activity. |
| Cellular localization | Cytoplasm. Cell membrane. Colocalizes with RGS14 and BRAF in both the cytoplasm and membranes. |

Images



ab62292 Kinase assay plot



Recombinant Raf1 (mutated Y340E + Y341E) protein (Active)
(ab62292) + RAF1

Predicted band size: 63 kDa

Observed band size: 63 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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