## Product Information

## Size:

50ul
Reactivity:
Human, Mouse, Rat

## Source:

Rabbit
Isotype:
IgG
Applications:
ELISA, WB, IHC

## Recommended dilutions:

ELISA:1:1000-1:2000, WB:1:200-1:1000,
IHC:1:30-1:150

## Protein Background:

Functions as a guanine nucleotide exchange factor (GEF), which activates Rap and Ras family of small GTPases by exchanging bound GDP for free GTP in a cAMP-dependent manner. Serves as a link between cell surface receptors and Rap/Ras GTPases in intracellular signaling cascades. Acts also as an effector for Rap1 by direct association with Rap1-GTP thereby leading to the amplification of Rap1-mediated signaling. Shows weak activity on HRAS. It is controversial whether RAPGEF2 binds cAMP and cGMP or not. Its binding to ligand-activated beta-1 adrenergic receptor ADRB1 leads to the Ras activation through the $\mathrm{G}(\mathrm{s})$-alpha signaling pathway. Involved in the cAMP-induced Ras and Erk1/2 signaling pathway that leads to sustained inhibition of long term melanogenesis by reducing dendrite extension and melanin synthesis. Provides also inhibitory signals for cell proliferation of melanoma cells and promotes their apoptosis in a cAMP-independent nanner.

## Gene ID:

UBA1

## Uniprot

P22314

## Synonyms:

ubiquitin-like modifier activating enzyme 1

## Immunogen:

Synthetic peptide of human UBA1.

## Storage:

-20\° C, pH7.4 PBS, 0.05\% NaN3, 40\% Glycerol


Gel: 6\%SDS-PAGE, Lysate: 40 \μ gPrimary antibody: PACO20805(UBA1 Antibody) at dilution 1/400 dilution, Secondary antibody: Goat anti rabbit $\operatorname{lgG}$ at $1 / 8000$ dilution, Exposure time: 1 minute.

The image on the left is immunohistochemistry of paraffin-embedded Human esophagus cancer tissue using PACO20805(UBA1 Antibody) at dilution 1/40, on the right is treated with synthetic peptide. (Original magnification: x-200).

