For Research Use Only

## CoraLite® Plus 488-conjugated Phospho-ERK1/2 (Thr202/Tyr204) Recombinant antibody



Catalog Number: CL488-80031

**Basic Information** 

Catalog Number: CL488-80031 Concentration: 1000 ug/ml Source:

Rabbit P27361

Isotype: Full Name:
IgG mitogen-activated protein kinase 3

Calculated MW: 38-43 kDa Observed MW: 38-40 kDa

NM 002746

**UNIPROT ID:** 

GeneID (NCBI):

GenBank Accession Number:

Purification Method: Protein A purification

CloneNo.: 8D12

Excitation/Emission maxima wavelengths:
493 nm / 522 nm

**Applications** 

Tested Applications: FC (Intra) Species Specificity:

human, mouse

## **Background Information**

Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAPK1/ERK2 and MAPK3/ERK1 are the 2 MAPKs which play an important role in the MAPK/ERK cascade. They participate also in a signaling cascade initiated by activated KIT and KITLG/SCF. Depending on the cellular context, the MAPK/ERK cascade mediates diverse biological functions such as cell growth, adhesion, survival and differentiation through the regulation of transcription, translation, cytoskeletal rearrangements. The MAPK/ERK cascade plays also a role in initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors. MEK1 and MEK2 activate p44 and p42 through phosphorylation of activation loop residues Thr202/Tyr204 and Thr185/Tyr187, respectively. Several downstream targets of p44/42 have been identified, including p90RSK and the transcription factor Elk-1.

Storage

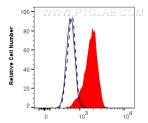
Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment. Storage Buffer:

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3  $\,$ 

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



CL488-80031 Phospho-ERK1/2 (Thr202/Tyr204)

1X10^6 HepG2 cells untreated (dashed lines) or treated with Calyculin A which intracellularly stained with 0.25 ug Coralite® Plus 488 Phospho-Erk1/2 (Thr202/Tyr204) Recombinant Antibody (CL488-80031, Clone:8D12)(red), or 0.25 ug Coralite® Plus 488 Rabbit IgG Isotype Control RecAb (CL488-98136, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.