For Research Use Only

## CALCA/Calcitonin Recombinant antibody, PBS Only (Capture)

Catalog Number:83774-1-PBS



**Basic Information** 

Catalog Number:

GenBank Accession Number:

Purification Method:

83774-1-PBS

NM\_001741.3 GeneID (NCBI): Protein A purification

Size:

Genero (No

CloneNo.: 240753G2

100ug, Concentration: 1 mg/ml by Nanodrop:

UNIPROT ID:

Source:

P01258

Rabbit Isotype:

Full Name: Calcitonin

IgG

Calculated MW:

15kDa

**Applications** 

**Tested Applications:** 

IF/ICC, FC (Intra), Cytometric bead array, Indirect

ELISA

Species Specificity:

human

**Product Information** 

83774-1-PBS targets CALCA/Calcitonin as part of a matched antibody pair:

MP00728-1: 83774-1-PBS capture and 83774-2-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

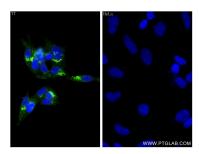
**Background Information** 

Calcitonin is a peptide hormone consisting of 32 amino acids, primarily synthesized by the parafollicular cells (C cells) of the human thyroid gland. It plays a crucial role in regulating calcium levels in the blood by decreasing them. Calcitonin opposes the actions of parathyroid hormone, which increases blood calcium levels. Calcitonin works through a G protein-coupled receptor, known as the calcitonin receptor, which predominantly transmits signals via the cAMP and PLC/IP3 pathways. Its primary physiological effects are on osteoclasts and the tubular epithelium of kidneys.

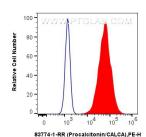
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

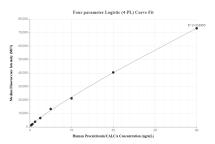
## Selected Validation Data



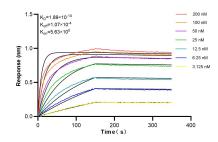
Immunofluorescent analysis of (4% PFA) fixed TT cells using Procalcitonin/CALCA antibody (83774-1-RR, Clone: 240753G2) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). (negative control: HeLa cells) This data was developed using the same antibody clone with 83774-1-PBS in a different storage buffer formulation.



1x10^6 TT cells were intracellularly stained with 0.25 ug Procalcitonin/CALCA Recombinant Antibody (83774-1-RR, Clone:240753G2) and PE-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83774-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00728-1, CALCA/CGRP Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83774-1-PBS. Detection antibody: 83774-2-PBS. Standard: Eg1060. Range: 0.313-40 ng/mL



Biolayer interferometry (BLI) kinetic assays of 83774-1-RR against Human CALCA/CGRP were performed. The affinity constant is 0.189 nM.