

Recombinant Human PIBF1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50788

Size: 10ug, 100ug

Protein Name: Progesterone-induced-blocking factor 1 (PIBF) (Centrosomal protein of 90 kDa) (CEP90)

Synonym: PIBF1, C13orf24, PIBF

UniProt ID: Q8WXW3

UniProt Link: www.uniprot.org/uniprotkb/Q8WXW3/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 757 AA

Molecular Weight: 90 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSRKISKESKKVNISSSSLESEDISLETTVPTDDISSSEEREGKVRITRQLIERKELLHNIQLLKIELSQKT
MMIDNLKVDYLTKEELEEKLNDALHQQQLTLRLDNQLAFQQKDASKYQELMKQEMETILLRQKQLE
ETNLQLREKAGDVRRNLRDFELTEEQYIKLKAFPEDQLSIPEYVSVRFYELVNPLRKEICELQVKKNIL
AEELSTNKNQLKQLTETYEEDRKNYSEVQIRCQRLALELADTKQLIQQGDYRQENYDKVKSERDALE
QEVIELRRKHEILEASHMIQTKERSSELSKEVVTLEQTVTLLQKDKEYLNRQNMELSVRCAHEEDRLER
LQAQLEESKKAREEMYEKYVASRDHYKTEYENKLHDELEQIRLKTNQEIDQLRNASREMYERENRN
LREARDNAVAEKERAVMAEKDALEKHDQLLDYRELQLSTESKVTEFLHQSKLKSFESESVQLLQEE
TARNLTQCQLECEKYQKKLEVLTKEFYSLQASSEKRITELQAQNSEHQARLDIYEKLEKELDEIIMQTA
EIENEDEAERVLFSYGYGANVPTTAKRRLKQSVHLARRVLQLEKQNSLILKDLEHRKDQVTQLSQEL
DRANSLNQTQQPYRYLIESVRQRDSKIDSLTESIAQLEKDVSNLNKEKSALLQTKNQMALDLEQLLN
HREELAAMKQILVKMHSKHSSENSLLLTKEPKHVTENQKSKTLNVPKEHEDNIFTPKPTLFTKKEAPE
WSKKQKMKT

3. Buffer Composition



Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Progesterone-induced-blocking factor 1 (PIBF) (Centrosomal protein of 90 kDa) (CEP90) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Plays a role in ciliogenesis.; [Isoform 1]: Pericentriolar protein required to maintain mitotic spindle pole integrity (PubMed:21224392). Required for the centrosomal accumulation of PCM1 and the recruitment of centriolar satellite proteins such as BBS4. Via association with PCM1 may be involved in primary cilia formation (PubMed:23110211). Required for CEP63 centrosomal localization and its interaction with WDR62. Together with CEP63 promotes centriole duplication. Promotes the centrosomal localization of CDK2 (PubMed:26297806).; [Isoform 4]: The secreted form is a mediator of progesterone that by acting on the phospholipase A2 enzyme interferes with arachidonic acid metabolism, induces a Th2 biased immune response, and by controlling decidual natural killer cells (NK) activity exerts an anti-abortive effect (PubMed:12516630, PubMed:14634107, PubMed:3863495). Increases the production of Th2-type cytokines by signaling via the JAK/STAT pathway. Activates STAT6 and inhibits STAT4 phosphorylation. Signaling via a not identified receptor seems to implicate IL4R and a GPI-anchored protein (PubMed:16393965, PubMed:25218441).

Subcellular Localization: Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cytoplasm . Secreted . Note=In progesterone-treated astrocytoma cells a 57 kDa protein and isoform 1 (90 kDa) have been described, both being located in the intracellular medium and secreted. Respective predominant forms are isoform 1 in the intracellular and the 57 kDa protein in the extracellular medium (PubMed:25218441).; [Isoform 1]: Nucleus . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite . Secreted . Note=Localizes to centriolar satellites throughout the cell cycle.; [Isoform 4]: Secreted . Note=Secreted by progesterone-treated lymphocytes (PubMed:14634107).

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.