

Prolactin (PRL) Active Protein | PRL active protein

Active Prolactin (PRL)

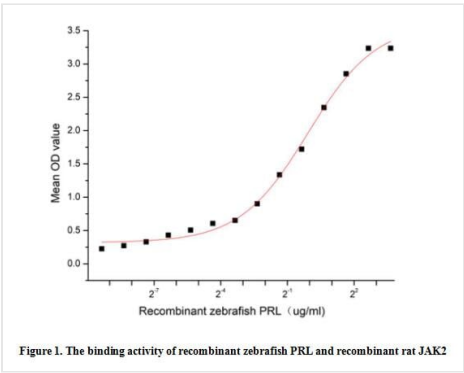
CATALOG # AAA161790	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Prolactin (PRL); Active Prolactin (PRL); Prolactin; LTH; Luteotropic Hormone4; PRL active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Met1~Cys21 0
Applicable Applications for PRL active protein	Activity Assay, Cell Culture
Species	Zebrafish
Expression System	Prokaryotic expression
Tag	N-terminal His and GST Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	8.2
Research Area	Endocrinology, Reproductive science, Genetic science, Hormone metabolism
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

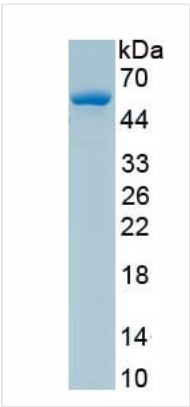


Bioactivity

PRL (prolactin), also known as luteotropin, is a hormone secreted from the pituitary gland and is best known for its role in enabling mammals to produce milk. PRL plays an essential role in metabolism, regulation of the immune system through activating its specific membrane-anchored receptor (PRLR). PRL can bind to PRLR, inducing JAK2 association that leads to downstream activation of multiple pathways that include STAT3, STAT5, PI3K, AKT, and ERK. A functional binding ELISA assay was conducted to detect the interaction of recombinant zebrafish PRL and recombinant rat JAK2. Briefly, PRL was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to JAK2-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-PRL pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant zebrafish PRL and recombinant rat JAK2 was shown in Figure 1, the EC50 for this effect is 0.95 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for PRL active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GeneID	791526
UniProt Accession #	Q569P7
Molecular Weight	53kDa

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/prolactin-prl/161790>