

Prolactin (PRL) Active Protein | PRL active protein

Active Prolactin (PRL)

CATALOG # AAA161787	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	Thr31~Cys2 29
Applicable Applications for PRL active protein	Activity Assay, Cell Culture
Species	Bovine
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	5.6
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

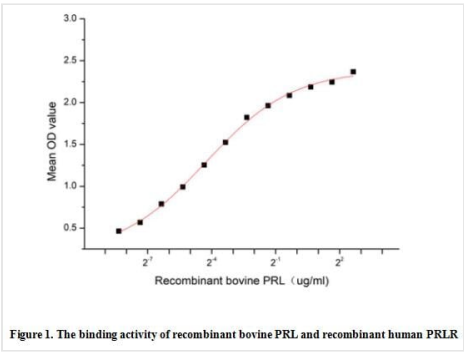
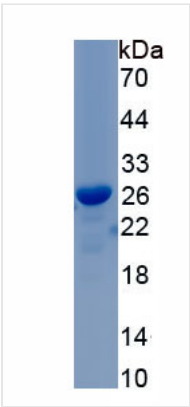


Figure 1. The binding activity of recombinant bovine PRL and recombinant human PRLR

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). A functional ELISA assay was conducted to detect the interaction of recombinant bovine PRL and recombinant human PRLR. Briefly, PRL was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to PRLR-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 bovine PRL and recombinant human PRLR was shown in Figure 1, the EC50 for this effect is 0.05 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 GI #	46810277
NCBI GeneID	280901
NCBI Accession #	NP_776378.2
NCBI GenBank Nucleotide #	NM_173953.2
UniProt Accession #	P01239; Q29417; Q95112; A6QLX8
Molecular Weight	25,793 Da
NCBI Official Full Name	prolactin
NCBI Official Symbol	PRL
NCBI Official Synonym Symbols	GHA1; Prol
NCBI Protein Information	prolactin
UniProt Protein Name	Prolactin
UniProt Gene Name	PRL
UniProt Synonym Gene Names	PRL

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.