



Product Data Sheet

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| <input type="checkbox"/> Cat # RP-598 | Recombinant (E.Coli) Human Parathyroid Hormone PTH, (7-34) | Size: <input type="checkbox"/> 50 ug |
| <input type="checkbox"/> Cat # RP-598-1000 | Recombinant (E.Coli) Human Parathyroid Hormone PTH, (7-34) | Size: <input type="checkbox"/> 1000 ug |

Polypeptide hormones (PTH) secreted by the parathyroid glands, which promote release of calcium from bone to extracellular fluid by activating osteoblasts and inhibiting osteoclasts, indirectly promote increased intestinal absorption of calcium, and promote renal tubular reabsorption of calcium and increased renal excretion of phosphates. PTH is secreted by the chief cells of the parathyroid glands as a polypeptide containing 84 amino acids, yet effective hormone-receptor interaction requires solely the 34-N-terminal amino acids. It is a major regulator of bone metabolism. Secretion of parathyroid hormone increases when the level of calcium in the extracellular fluid is low. Its action is opposed by calcitonin.

PTH (7-34), which is a PTH/PTHrP receptor antagonist, can stimulate hair growth and epidermal proliferation in mice.

Synonyms:

PTH/PTHrP receptor antagonist, PTHrP analog, PTHR; MGC138426; MGC138452.

PTH full length 115-aa
 Signal peptide 1-25 Propeptide: 26-31 (6 aa)
 Chain: 32-115 (84 aa)

Source and Form

Human PTH (7-34) is produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 28 amino acids (98%, 3.38 kda). It is supplied in 20mM PBS pH-7.0 and 4% mannitol (see lot specific conc on the vial) or white lyophilized (freeze-dried) powder. It is recommended to reconstitute the lyophilized PTH in distilled H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Lyophilized PTH although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution PTH should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage

Amino acid sequence: PTH 7-34 aa

Leu-Met-His-Asn-Leu-Gly-Lys-His-Leu-Asn-Ser-Met-Glu-Arg-Val-Glu-Trp-Leu-Arg-Lys-Lys-Leu-Gln-Asp-Val-His-Asn-Phe

Specificity

Human PTH7-34 aa is conserved in many species: Human, Gorilla, Monkey, horse (100%), Bovine (96%), pig, sheep (93%), cat (89%), rat (86%), and mouse (82%).

Biological Activity:

The activity calculated by UMR106 cell/cAMP method corresponding to a specific activity of 1.0 x 10⁴ Units/mg

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals

References: HENDY GN (1981) PNAS 78, 7365-7369; JACOBS, JW (1974) Nature 249, 155-157; NIALI HD (1974) PNAS 71, 384-388; KEUTMANN HT (1978) Biochem. 17, 5723-5729; ANDREATTA RH (1973) Helv. Chim. Acta 56, 470

Related Items

Catalog#	ProdDescription
0310	Human Parathyroid Hormone-Biotin (PTH-Biotin) ELISA Kit, 96 tests, Quantitative
0320-PTH	Human Parathyroid Hormone (PTH) ELISA Kit, 96 tests, Quantitative
MA-30024	Mouse Monoclonal Anti-Human Parathyroid hormone (PTH)
RP-1512	Human Parathyroid Hormone (PTH, 1-34)
RP-591	Recombinant (E.Coli) Human Parathyroid Hormone (PTH, 1-34)
RP-597	Recombinant (E.Coli) Human Parathyroid Hormone (PTH, 1-84)
RP-598	Recombinant (E.Coli) Human Parathyroid Hormone PTH, (7-34)
RP-598-1000	Human Parathyroid Hormone (PTH, 7-34)
SP-101127-1	Biotin-Parathyroid Hormone (PTH, 1-34), human
SP-101254-1	Parathyroid Hormone (PTH,1-34)-Lys(Biotin), human
SP-101255-1	Parathyroid Hormone (PTH,1-34) Rat
SP-101859-1	[Tyr0]-pTH-Related Protein (1-34) (human, rat)
SP-101861-1	[Tyr36]-pTH-Related Protein (1-36) (human, rat)
SP-101862-1	[Asn10,Leu11,D-Trp12]-pTH-Related Protein (7-34) amide (human, rat)
SP-101863-1	pTH-Related Protein Splice Isoform 3 (140-173) (human)
SP-101864-1	[Nle8'18,Tyr34]-pTH (1-34) amide (bovine)
SP-101866-1	[Tyr1]-pTH (1-34) (rat)
SP-101867-1	[Tyr1]-pTH (1-34), human
SP-101868-1	Parathyroid Hormone (PTH,1-38),
SP-101869-1	Parathyroid Hormone (PTH,1-44), human
SP-101870-1	pTH (3-34) (bovine)
SP-101871-1	[Nle8'18,Tyr34]-pTH (3-34) amide (bovine)
SP-101873-1	[Tyr34]-pTH (7-34) amide (bovine)
SP-101874-1	[D-Trp12,Tyr34]-pTH (7-34) amide (bovine)
SP-101875-1	pTH (13-34) (human)
SP-101876-1	[Tyr27]-pTH (27-48) (human)
SP-101877-1	pTH (28-48) (human)
SP-101878-1	[Nle8'21,Tyr34]-pTH (1-34) amide (rat)
SP-101879-1	[Tyr43] PTH (43-68) (human)
SP-101940-1	[Tyr52] PTH (52-84) (human)
SP-101941-1	pTH (53-84) (human)
SP-101942-1	"[Tyr63] PTH (63-84), human
SP-101943-1	[Asn76] PTH (64-84),
SP-101945-1	Parathyroid Hormone (PTH,70-84),
SP-50101-1	Parathyroid Hormone (PTH,1-34), human
SP-51920-1	pTH-Related Protein (1-34)
SP-52294-1	Parathyroid Hormone (PTH, 1-34), Bovine

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