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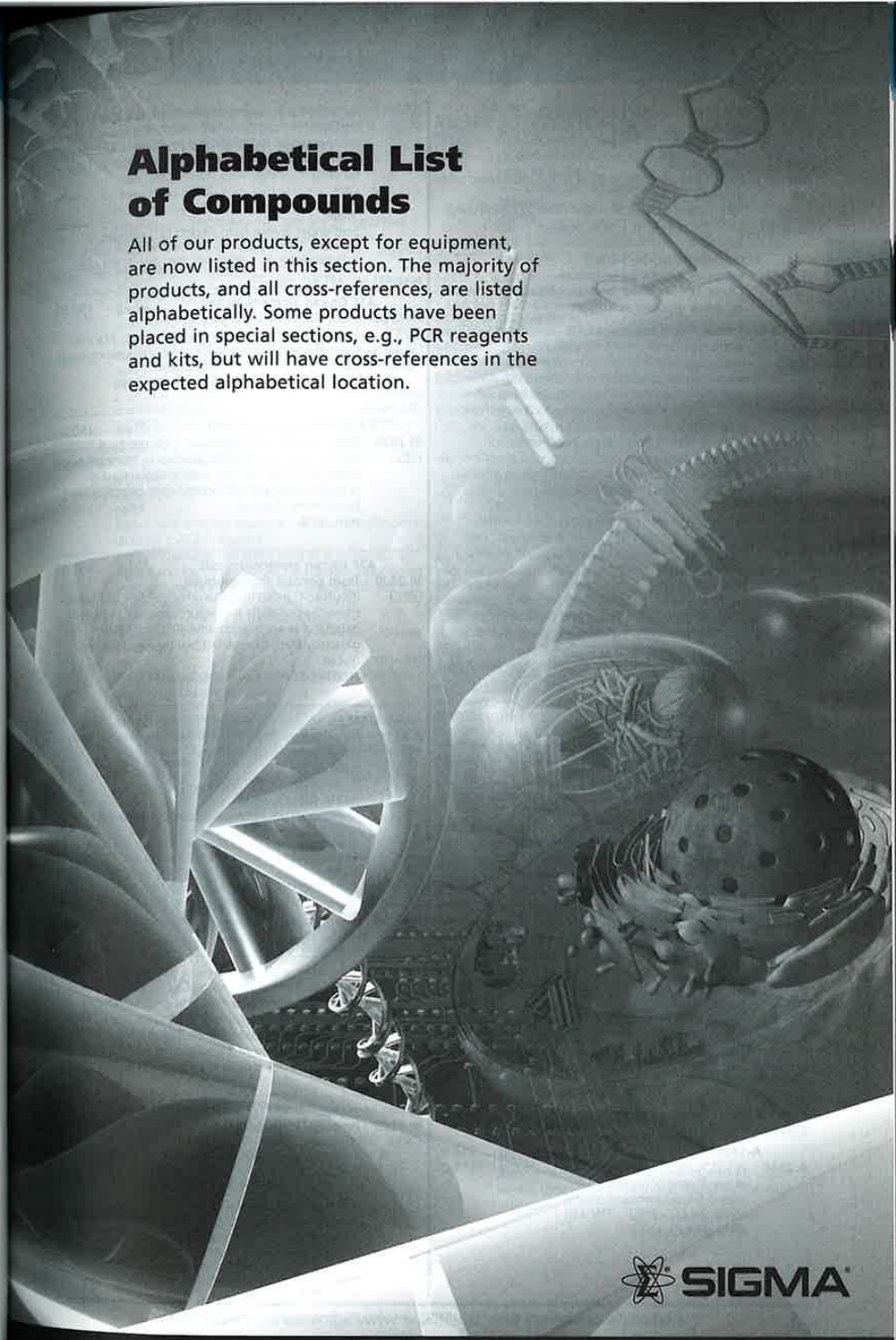
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All of our products, except for equipment, are now listed in this section. The majority of products, and all cross-references, are listed alphabetically. Some products have been placed in special sections, e.g., PCR reagents and kits, but will have cross-references in the expected alphabetical location.



US \$

(Continuation of)
Monoclonal Anti-Calcein (β-Subunit)**Application(s)**

Immunoblotting 1:3000 using a rat brain extract
Immunohistochemistry (formalin-fixed, paraffin-embedded sections) suitable using neurons in human myenteric and prostatic ganglia
Indirect ELISA suitable
Isotype IgM

C 3937 Calcein autoinhibitory fragment 250 µg 204.60

ment
Ile-Thr-Ser-Phe-Glu-Glu-Ala-Lys-Gly-Leu-Asp-Arg-Ile-Asn-Glu-Arg-Met-Pro-Pro-Arg-Arg-Asp-Ala-Met-Pro [748067-21-4] C₁₂₄H₂₀₅N₃₉O₃₉S₂ FW 2930
min. 90% (HPLC)
Ref.: 1. Hashimoto, Y., et al., *J. Biol. Chem.* **265**, 1924 (1990)

Calcein substrate See: Protein Kinase Related Peptides Page 1718
Calcitol See: Cholecalciferol Page 477**C 2355** Anti-Calcein 0.1 mL 236.40

antibody produced in rabbit
Whole antiserum, Lyophilized powder
Ref.: 1. Hokfelt, T., et al., *Experientia Suppl.* **56**, 154 (1987)
2. Sudhof, T.C., *Nature* **375**, 645 (1995)

T 1284 Calcitonin eel 50 µg 63.00

Thyrocalcitonin Eel; Cys-Ser-Asn-Leu-Ser-Thr-Cys-Val-Leu-Gly-Lys-Leu-Ser-Gln-Glu-Leu-His-Lys-Leu-Gln-Thr-Tyr-Pro-Arg-Thr-Asp-Val-Gly-Ala-Gly-Thr-Pro-NH₂ [Disulfide bridge: 1-7] [57014-02-5] C₁₄₆H₂₄₁N₄₃O₄₇S₂ FW 3414
min. 97% (HPLC)

Hypocalcemic hormone produced by the parafollicular C cells of the thyroid or by the ultimobranchial bodies of nonmammalian vertebrates. Decreases blood calcium and phosphate due to inhibition of resorption by osteoblasts and osteocytes.

A 32 amino acid polypeptide, 8 of which are conserved across all species.

Ref.: 1. Tenenhouse, A., et al., *Proc. Nat. Acad. Sci. USA* **53**, 818 (1965)
2. Brewer, H.B., et al., *J. Biol. Chem.* **245**, 4232 (1970)
3. Schlueter, et al., *Endocrinology* **81**, 854 (1967)
4. Farley, J. R., et al., *Endocrinology* **123**, 159 (1988)

A 0597 Acetyl-[Asn³⁰, Tyr³²]-Calcitonin fragment 8-32 trifluoroacetate salt 500 µg 168.50

AC 187; Ac-Val-Leu-Gly-Lys-Leu-Ser-Gln-Glu-Leu-His-Lys-Leu-Gln-Thr-Tyr-Pro-Arg-Thr-Asn-Thr-Tyr-NH₂ [151804-77-2] C₁₂₇H₂₀₅N₃₇O₄₀ FW 2890
min. 97% (HPLC)

Potent and selective antagonist of amylin-induced hyperglycaemia and hyperlactaemia.

Ref.: 1. Lutz, T.A., et al., Amylin receptors mediate the anorectic action of salmon calcitonin (sCT) *Peptides* **21**, 233 (2000)

C 8198 Anti-Calcein Gene Related Peptide (CGRP) 0.2 mL 329.50

antibody produced in rabbit
Whole antiserum, liquid
Immunogen: CGRP-KLH
Species reactivity: rat
contains 15 mM sodium azide
Application(s)
Radioimmunoassay 1:5,000
Dot blot 1:10,000
Immunohistochemistry 1:8,000 using 4% paraformaldehyde perfusion-fixed, frozen sections of rat brain

Monoclonal Anti-Calcein Gene-Related Peptide

Anti-CGRP

Isotype IgG1

C 9487 Monoclonal Anti-Calcein 100 µL 267.80

Gene-Related Peptide
antibody produced in mouse
Clone CD8, Purified immunoglobulin, Buffered aqueous solution

Immunogen: peptide corresponding to the C-terminal of rat α-calcein gene-related peptide (CGRP). Solution at approximately 100 µg/ml in 20 mM sodium phosphate buffer containing 0.01% sodium azide.

Species reactivity: human, guinea pig

Application(s)

Indirect immunofluorescence 1:500 using overnight incubation at 4°C
Immunohistochemistry (formalin-fixed, paraffin-embedded sections) 1:200-1:1,000 using overnight incubation at 4°C and sections that have been protease-digested or processed by high temperature antigen retrieval

Immunocytochemistry suitable

Ref.: 1. Amara, S.G., et al., *Science* **229**, 1094-1097 (1985)**C 7113** Monoclonal Anti-Calcein 100 µL 250.00

Gene-Related Peptide
antibody produced in mouse
approx. 2 mg/ml, Clone 4901, Purified immunoglobulin, Buffered aqueous solution

Immunogen: rat α-CGRP peptide. The epitope recognized by the antibody resides within the C-terminal ten amino acids of rat α-CGRP. Cross-reacts with human and dog α- and β-CGRP. Solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

Species reactivity: rat

Application(s)

Indirect ELISA 0.5 µg/ml using rat α-CGRP

Radioimmunoassay suitable

Immunocytochemistry suitable

Neutralization suitable

C 2806 Calcitonin Gene Related Peptide 0.1 mg 50.50

fragment 8-37 human 0.5 mg 168.50

α-CGRP 8-37; FBHuman; Val-Thr-1 mg 294.00

His-Arg-Leu-Ala-Gly-Leu-Leu-Ser-

Arg-Ser-Gly-Gly-Val-Val-Lys-Asn-Asn-Phe-Val-Pro-

Thr-Asn-Val-Gly-Ser-Lys-Ala-Phe-NH₂[719911-68-1] C₁₃₉H₂₃₀N₄₄O₃₈ FW 3125

min. 97% (HPLC), powder

Selective competitive antagonist at CGRP receptors but not at calcitonin receptors.

Peptide content approx. 70%

Ref.: 1. Chiba, T., et al., Calcitonin gene-related peptide receptor antagonist human CGRP-(8-37) *Am. J. Physiol.* **256**, E331 (1989)2. Han, S.P., et al., Inhibition of periauricular nerve stimulation-induced vasodilation of the mesenteric arterial bed by CGRP (8-37) and CGRP receptor desensitization *Biochem. Biophys. Res. Comm.* **168**, 786-791 (1990)3. Escott, K.J., and Brain, S.D., Effect of a calcitonin gene-related peptide antagonist (CGRP8-37) on skin vasodilation and oedema induced by stimulation of the rat saphenous nerve *Br. J. Pharmacol.* **110**, 772-776 (1993)**C 0167** Calcitonin Gene Related Peptide 0.1 mg 70.90

human 250 µg 155.00

CGRP-I; α-CGRP; Ala-Cys-Asp-0.5 mg 260.00

Thr-Ala-Thr-Cys-Val-Thr-His-Arg-

Leu-Ala-Gly-Leu-Leu-Ser-Arg-Ser-Gly-Gly-Val-Val-Lys-

Asn-Asn-Phe-Val-Pro-Thr-Asn-Val-Gly-Ser-Lys-Ala-

Phe-NH₂ [Disulfide Bridge: 27][90954-53-3] C₁₆₃H₂₆₇N₅₁O₄₉S₂ FW 3789

min. 95% (HPLC), powder

Potent, long-lasting vasodilator; activation of CGRP receptors on pancreatic β-cells increases plasma levels of pancreatic enzymes.

C 1044 β-Calcein Gene Related Peptide 0.1 mg 81.20

human 1 mg 405.00

β-CGRP; CGRP-II; Ala-Cys-Asn-

Thr-Ala-Thr-Cys-Val-Thr-His-Arg-Leu-Ala-Gly-Leu-

Leu-Ser-Arg-Ser-Gly-Gly-Met-Val-Lys-Ser-Asn-Phe-

350

◆ Shipping information — page 6 • Larger quantities — see page 16

Val-Pro-Thr-Asn-Val-Gly-Ser-Lys-

fide Bridge: 2-7]

[98824-26-1] C₁₆₂H₂₆₇N₅₁O₄₉

min. 97% (HPLC)

Potent hypotensive agent and

Peptide content approx. 70%

Ref.: 1. Steenburgh, P.H., et al., *FEBS Lett.*2. Steenburgh, P.H., et al., *FEBS Lett.*

9487
Monoclonal Anti-Calcitonin Gene-Related Peptide antibody produced in mouse
Clone CD8, Purified immunoglobulin, Buffered aqueous solution

Immunogen: peptide corresponding to the C-terminal of rat α -calcitonin gene-related peptide (CGRP). Solution at approximately 100 μ g/ml in 20 mM sodium phosphate buffer containing 0.01% sodium azide.
 Species reactivity: human, guinea pig
Applications
 Indirect immunofluorescence: 1:500 using overnight incubation at 4°C
 Immunohistochemistry (formalin-fixed, paraffin-embedded sections): 1:200-1:1,000 using overnight incubation at 4°C and sections that have been protease-digested or processed by high temperature antigen retrieval
 Immunocytochemistry: suitable
 Ref.: 1. Amara, S.G., et al., *Science* **229**, 1094-1097 (1985)

7113
Monoclonal Anti-Calcitonin Gene-Related Peptide antibody produced in mouse
approx. 2 mg/ml, Clone 4901, Purified immunoglobulin, Buffered aqueous solution

Immunogen: rat α -CGRP peptide. The epitope recognized by the antibody resides within the C-terminal ten amino acids of rat α -CGRP. Cross-reacts with human and dog α - and β -CGRP. Solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.
 Species reactivity: rat
Applications
 Indirect ELISA: 0.5 μ g/ml using rat α -CGRP
 Radioimmunoassay: suitable
 Immunocytochemistry: suitable
 Neutralization: suitable

2806
Calcitonin Gene Related Peptide fragment 8-37 human

0.1 mg	50.50
0.5 mg	168.50
1 mg	294.00

α -CGRP 8-37; FBHuman; Val-Thr-His-Arg-Leu-Ala-Gly-Leu-Leu-Ser-Arg-Ser-Gly-Gly-Val-Lys-Asn-Asn-Phe-Val-Pro-Thr-Asn-Val-Gly-Ser-Lys-Ala-Phe-NH₂ [119917-68-1] C₁₃₉H₂₃₀N₄₄O₃₈ FW 3125
min. 97% (HPLC), powder
 Selective competitive antagonist at CGRP receptors but not at calcitonin receptors.
 Peptide content approx. 70%
 Ref.: 1. Chiba, T., et al., Calcitonin gene-related peptide receptor antagonist human CGRP-(8-37) *Am. J. Physiol.* **256**, E331 (1989)
 2. Han, S.P., et al., Inhibition of periarterial nerve stimulation-induced vasodilation of the mesenteric arterial bed by CGRP (8-37) and CGRP receptor desensitization *Biochem. Biophys. Res. Comm.* **168**, 786-791 (1990)
 3. Escott, K.J., and Brain, S.D., Effect of a calcitonin gene-related peptide antagonist (CGRP8-37) on skin vasodilation and oedema induced by stimulation of the rat saphenous nerve *Br. J. Pharmacol.* **110**, 772-776 (1993)

0167
Calcitonin Gene Related Peptide human

0.1 mg	70.90
250 μ g	155.00
0.5 mg	260.00

CGRP-I; α -CGRP; Ala-Cys-Asp-Thr-Ala-Thr-Cys-Val-Thr-His-Arg-Leu-Ala-Gly-Leu-Leu-Ser-Arg-Ser-Gly-Gly-Val-Lys-Asn-Asn-Phe-Val-Pro-Thr-Asn-Val-Gly-Ser-Lys-Ala-Phe-NH₂ [Disulfide Bridge: 27] [90954-53-3] C₁₆₃H₂₆₇N₅₁O₄₉S₂ FW 3789
min. 95% (HPLC), powder
 Potent, long-lasting vasodilator; activation of CGRP receptors on pancreatic β -cells increases plasma levels of pancreatic enzymes.

0283
 β -Calcitonin Gene Related Peptide human

0.1 mg	81.20
1 mg	405.00

β -CGRP; CGRP-II; Ala-Cys-Asn-Thr-Ala-Thr-Cys-Val-Thr-His-Arg-Leu-Ala-Gly-Leu-Leu-Ser-Arg-Ser-Gly-Gly-Met-Val-Lys-Ser-Asn-Phe-

Val-Pro-Thr-Asn-Val-Gly-Ser-Lys-Ala-Phe-NH₂ [Disulfide Bridge: 2-7] [98824-26-1] C₁₆₂H₂₆₇N₅₁O₄₈S₃ FW 3793
min. 97% (HPLC)
 Potent hypotensive agent and vasodilator.
 Peptide content approx. 70%
 Ref.: 1. Steenburgh, P.H., et al., *FEBS Lett.* **183**, 403 (1985)
 2. Steenburgh, P.H., et al., *FEBS Lett.* **209**, 97 (1986)

0292
Calcitonin Gene Related Peptide rat

0.1 mg	83.80
250 μ g	183.50
0.5 mg	307.50

CGRP-I; α -CGRP; Ser-Cys-Asn-Thr-Ala-Thr-Cys-Val-Thr-His-Arg-Leu-Ala-Gly-Leu-Leu-Ser-Arg-Ser-Gly-Gly-Val-Lys-Asp-Asn-Phe-Val-Pro-Thr-Asn-Val-Gly-Ser-Glu-Ala-Phe-NH₂ [Disulfide Bridge: 27] [96827-03-1] C₁₆₂H₂₆₂N₅₀O₅₂S₂ FW 3806
min. 97% (HPLC), powder
 Potent, long-lasting vasodilator; activation of CGRP receptors on pancreatic β -cells increases plasma levels of pancreatic enzymes.

3535
Calcitonin human

50 μ g	73.00
250 μ g	205.00
0.5 mg	314.00
1 mg	523.00

Thyrocalcitonin; hCT; Calcitonin, human reduced cyclic (1 \rightarrow 7)-disulfide; Calcitonin M, human C carcinoma; Cys-Gly-Asn-Leu-Ser-Thr-Cys-Met-Leu-Gly-Thr-Tyr-Thr-Gln-Asp-Phe-Asn-Lys-Phe-His-Thr-Phe-Pro-Gln-Thr-Ala-Ile-Gly-Val-Gly-Ala-Pro-NH₂ [Disulfide Bridge: 1-7] [21215-62-3] C₁₅₁H₂₂₆N₄₀O₄₅S₃ FW 3417
min. 97% (HPLC), powder
 Hypocalcemic hormone produced by the parafollicular C cells of the thyroid or by the ultimobranchial bodies of nonmammalian vertebrates. Decreases blood calcium and phosphate due to inhibition of resorption by osteoblasts and osteocytes.
 A 32 amino acid polypeptide, 8 of which are conserved across all species.
 H-(Cys-Gly-Asn-Leu-Ser-Thr-Cys)₁-Met-Leu-Gly-Thr-Tyr-Thr-Gln-Asp-Phe-Asn-Lys-Phe-His-Thr-Phe-Pro-Gln-Thr-Ala-Ile-Gly-Val-Gly-Ala-Pro-NH₂
 Ref.: 1. Tenenhouse, A., et al., *Proc. Nat. Acad. Sci. USA* **53**, 818 (1965)
 2. Brewer, H.B., et al., *J. Biol. Chem.* **245**, 4232 (1970)
 3. Schlueter, et al., *Endocrinology* **81**, 854 (1967)
 4. Farley, J. R., et al., *Endocrinology* **123**, 159 (1988)
 S: 22-24/25

0158
Calcitonin porcine

0.1 mg	29.80
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Thyrocalcitonin; Cys-Ser-Asn-Leu-Ser-Thr-Cys-Val-Leu-Ser-Ala-Tyr-Trp-Arg-Asn-Leu-Asn-Asn-Phe-His-Arg-Phe-Ser-Gly-Met-Gly-Phe-Gly-Pro-Glu-Thr-Pro-NH₂ [Disulfide Bridge: 1-7] [12321-44-7] C₁₅₉H₂₃₂N₄₆O₄₅S₃ FW 3604
min. 97% (HPLC)
 Hypocalcemic hormone produced by the parafollicular C cells of the thyroid or by the ultimobranchial bodies of nonmammalian vertebrates. Decreases blood calcium and phosphate due to inhibition of resorption by osteoblasts and osteocytes.
 A 32 amino acid polypeptide, 8 of which are conserved across all species.
 Ref.: 1. Tenenhouse, A., et al., *Proc. Nat. Acad. Sci. USA* **53**, 818 (1965)
 2. Brewer, H.B., et al., *J. Biol. Chem.* **245**, 4232 (1970)
 3. Schlueter, et al., *Endocrinology* **81**, 854 (1967)
 4. Farley, J. R., et al., *Endocrinology* **123**, 159 (1988)

0283
Calcitonin rat

50 μ g	42.20
250 μ g	153.00
1 mg	337.50

Thyrocalcitonin; Cys-Gly-Asn-Leu-Ser-Thr-Cys-Met-Leu-Gly-Thr-Tyr-Thr-Gln-Asp-Leu-Asn-Lys-Phe-His-Thr-Phe-Pro-Gln-Thr-Ser-Ile-Gly-Val-Gly-Ala-Pro-NH₂ [Disulfide Bridge: 1-7] [11118-25-5] C₁₄₈H₂₂₈N₄₆O₄₆S₃ FW 3399
min. 95% (HPLC), powder
 Hypocalcemic hormone produced by the parafollicular C cells of the thyroid or by the ultimobranchial

bodies of nonmammalian vertebrates. Decreases blood calcium and phosphate due to inhibition of resorption by osteoblasts and osteocytes.
 A 32 amino acid polypeptide, 8 of which are conserved across all species.
 Ref.: 1. Tenenhouse, A., et al., *Proc. Nat. Acad. Sci. USA* **53**, 818 (1965)
 2. Brewer, H.B., et al., *J. Biol. Chem.* **245**, 4232 (1970)
 3. Schlueter, et al., *Endocrinology* **81**, 854 (1967)
 4. Farley, J. R., et al., *Endocrinology* **123**, 159 (1988)

3660
Calcitonin salmon

50 μ g	40.20
250 μ g	146.50
0.5 mg	230.50
1 mg	322.00

Thyrocalcitonin; Cys-Ser-Asn-Leu-Ser-Thr-Cys-Val-Leu-Gly-Lys-Leu-Ser-Gln-Glu-Leu-His-Lys-Leu-Gln-Thr-Tyr-Pro-Arg-Thr-Asn-Thr-Gly-Ser-Gly-Thr-Pro-NH₂ [Disulfide Bridge: 1-7] [47931-85-1] C₁₄₅H₂₄₀N₄₄O₄₈S₂ FW 3431
min. 97% (HPLC), powder
 Hypocalcemic hormone produced by the parafollicular C cells of the thyroid or by the ultimobranchial bodies of nonmammalian vertebrates. Decreases blood calcium and phosphate due to inhibition of resorption by osteoblasts and osteocytes.
 A 32 amino acid polypeptide, 8 of which are conserved across all species.
 H-(Cys-Ser-Asn-Leu-Ser-Thr-Cys)₁-Val-Leu-Gly-Lys-Leu-Ser-Gln-Glu-Leu-His-Lys-Leu-Gln-Thr-Tyr-Pro-Arg-Thr-Asn-Thr-Gly-Ser-Gly-Thr-Pro-NH₂
 Ref.: 1. Tenenhouse, A., et al., *Proc. Nat. Acad. Sci. USA* **53**, 818 (1965)
 2. Brewer, H.B., et al., *J. Biol. Chem.* **245**, 4232 (1970)
 3. Schlueter, et al., *Endocrinology* **81**, 854 (1967)
 4. Farley, J. R., et al., *Endocrinology* **123**, 159 (1988)
 S: 22-24/25

Calcitriol See: $1\alpha,25$ -Dihydroxyvitamin D₃ Page 662

Calcium acetate hydrate
 [62-54-4] (CH₃COO)₂Ca · aq FW 158.2
 R: 36/37/38 S: 26-36

1000	min. 99% (titration), powder	100 g	16.60
	Color: white	500 g	56.40
		2.5 kg	223.00

4705
SigmaUltra, approx. 99% (titration)

Insoluble matter:	<0.1%
Phosphorus (P):	<0.0005%
Chloride (Cl):	<0.05%
SO ₄ :	<0.05%
Al:	<0.0005%
Ammonium (NH ₄):	<0.1%
Cu:	<0.0005%
Fe:	<0.0005%
K:	<0.01%
Mg:	<0.1%
Na:	<0.05%
Pb:	<0.001%
Zn:	<0.001%

Calcium Activated Neutral Protease See: Calpain II Page 363

1540
Calcium-Binding Protein Vitamin D-induced from bovine mucosa
 [57607-43-9]
Lyophilized powder

0.1 mg	145.10
0.5 mg	567.00

Calcium bis(dihydrogenphosphate) monohydrate See: Calcium phosphate monobasic Page 357
Calcium/Calmodulin-Activated Protein Phosphatase See: Calcineurin Page 349
Calcium/calmodulin-dependent protein kinase II- δ fragment 345-358 See: Protein Kinase Related Peptides Page 1718

27,029-6
Calcium carbide

25 g	19.70
500 g	21.70
2 kg	27.80

[75-20-7] C₂Ca FW 64.10
 Aldrich: ~80%, pieces, tech., thickness ca. 8 mm
 Density: 2.22 g/ml (lit.)
 R: 15 S: 8-43

• Larger quantities — see page 16

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