K082503

DEC 19 2008

510(k) Summary for

Dimension Vista® KAPPA Flex® reagent cartridge

Dimension Vista® LAMBDA Flex® reagent cartridge

Dimension Vista® Protein 1 Calibrator

Dimension Vista® Protein 1 Control L, M and H

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

The assigned 510(k) number is:

1. Manufacturer's Name, Address, Telephone, and Contact Person, Date of Preparation:

Manufacturer: Dade Behring Marburg GmbH

Emil-von-Behring Str. 76

35041 Marburg, Germany

Contact Information: Siemens Healthcare Diagnostics.

500 GBC Drive, M/S 514

Newark, Delaware 19702

Attn: Anna Marie Kathleen Ennis

Tel: 302-632-9352

Fax: 302-631-6299

Preparation date: August 27, 2008

2. Device Name:

Dimension Vista® KAPPA Flex® reagent cartridge
Dimension Vista® LAMBDA Flex® reagent cartridge

Dimension Vista® PROT 1 CAL

Dimension Vista® PROT 1 CON, L, M and H

Classification: Class II; Class II; Class I

Product Code: DEH, DFH, JIX, JJY

Panel: Immunology (82) and Clinical Chemistry (75)

3. Identification of the Legally Marketed Devices:

Dade Behring N Antisera to Human Immunoglobulin/L-chains - K860894

N Protein Standard SL - K012470

N/T Protein Controls SL - K012468

4. Device Descriptions:

Dimension Vista® KAPPA Flex® reagent cartridge

Proteins contained in human body fluids form immune complexes in an immunochemical reaction with specific antibodies. These complexes scatter a beam of light passed through the sample. The intensity of the scattered light is proportional to the concentration of the respective protein in the sample. The result is evaluated by comparison with a standard of known concentration.

Dimension Vista® LAMBDA Flex® reagent cartridge

Proteins contained in human body fluids form immune complexes in an immunochemical reaction with specific antibodies. These complexes scatter a beam of light passed through the sample. The intensity of the scattered light is proportional to the concentration of the respective protein in the sample. The result is evaluated by comparison with a standard of known concentration.

Dimension Vista® Protein 1 Calibrator

Protein 1 Calibrator is a multi-analyte, liquid human serum based product containing: a_1-acid glycoprotein, a_1 -antitrypsin, a_2- macroglobulin,b_2-microglobulin, C3 complement, C4 complement, ceruloplasmin, haptoglobin, hemopexin, homocysteine, immunoglobulin A, immunoglobulin E, immunoglobulin G, immunoglobulin G subclass 1, immunoglobulin G subclass 2, immunoglobulin G subclass 3, immunoglobulin G subclass 4, immunoglobulin light chains type kappa, immunoglobulin light chains type lambda, immunoglobulin M, prealbumin, retinol binding protein, soluble transferrin receptor and transferrin.

Dimension Vista® Protein 1 Control L

Protein 1 Control L is a multi-analyte, low level liquid human serum based product containing : a_1-acid glycoprotein, a_1 -antitrypsin, a_2- macroglobulin, C3 complement, C4 complement, ceruloplasmin, haptoglobin, hemopexin, homocysteine, immunoglobulin A, immunoglobulin E, immunoglobulin G, immunoglobulin G subclass 1, immunoglobulin G subclass 2, immunoglobulin G subclass 3, immunoglobulin G subclass 4, i mmunoglobulin light chains type kappa, immunoglobulin light chains type lambda, immunoglobulin M, prealbumin, retinol binding protein, soluble transferrin receptor and transferrin

Dimension Vista® Protein 1 Control M and H

Protein 1 Control M and H are multi-analyte, mid and high level respectively, liquid human serum based products containing: a_1 -acid glycoprotein, a_1 -antitrypsin, a_2-macroglobulin, b_2 -microglobulin, C3 complement, C4 complement, ceruloplasmin, haptoglobin, hemopexin, homocysteine, immunoglobulin A, immunoglobulin E, immunoglobulin G, immunoglobulin G subclass 1, immunoglobulin G subclass 2, immunoglobulin G subclass 3, immunoglobulin G subclass 4, immunoglobulin M, immunoglobulin light chains type kappa, immunoglobulin light chains type lambda, prealbumin, retinol binding protein, soluble transferrin receptor, and transferrin.

5. Device Intended Uses

Dimension Vista® KAPPA Flex® reagent cartridge:

The KAPPA method is an *in vitro* diagnostic test for the quantitative measurement of immunoglobulin light chains, type kappa in human serum and plasma on the Dimension Vista® Systems. Measurements of the various amounts of the different types of light chains aid in the diagnosis of multiple myeloma (cancer of antibody-forming cells), lymphocytic neoplasms (cancer of lymphoid tissue), Waldenstrom's macroglobulinemia (increased production of large immunoglobulins), and connective tissue diseases such as rheumatoid arthritis or systemic lupus erythematosus.

Dimension Vista® LAMBDA Flex® reagent cartridge:

The LAMBDA method is an *in vitro* diagnostic test for the quantitative measurement of immunoglobulin light chains, type lambda in human serum and plasma on the Dimension Vista® Systems. Measurements of the various amounts of the differant types of light chains aid in the diagnosis of multiple myeloma cancer of antibody-forming cells) lymphocytic neoplasms (cancer of lymohoid tissue), Waldenstom's macroglobulinemia (increased production of large immunoglobulins), and connective tissue diseases such as rheumatoid arthritis or systemic lupus erythematosus.

Dimension Vista® PROT 1 CAL:

PROT1 CAL is an *in vitro* diagnostic product for the calibration of the Dimension Vista® Systems for: a_1-Acid Glycoprotein (A1AG), a_1-Antitrypsin (A1AT), a_2 -macroglobulin

(A2MAC), b_2 -Microglobulin (B2MIC), C3 Complement (C3), C4 Complement (C4), Ceruloplasmin (CER), Haptoglobin (HAPT), Hemopexin (HPX), Homocysteine (HCYS), Immunoglobulin A (IGA), Immunoglobulin E (IGE), Immunoglobulin G (IGG, IGG-C*, IGG-U**), Immunoglobulin G subclass 1 (IGG1), Immunoglobulin G subclass 2 (IGG2), Immunoglobulin G subclass 3 (IGG3), Immunoglobulin G subclass 4 (IGG4), Immunoglobulin light chains type kappa (KAPPA), Immunoglobulin light chains type lambda (LAMBDA), Immunglobulin (IGM), Prealbumin (PREALB), Retinol Binding Protein (RBP), soluble Transferrin Receptor (STFR),Transferrin (TRF)

*For cerebrospinal fluid

** For urine

Dimension Vista® Protein 1 Control L

PROT1 CON L is an assayed, low level, intralaboratory quality control for assessment of precision and analytical bias on the Dimension Vista® Systems in the quantitative determination of: a_1-Acid Glycoprotein (A1AG), a_1-Antitrypsin (A1AT), a_2 -Macroglobulin (A2MAC), C3 Complement (C3), C4 Complement (C4), Ceruloplasmin (CER), Haptoglobin (HAPT), Hemopexin (HPX), Homocysteine (HCYS), Immunoglobulin A (IGA), Immunoglobulin E (IGE), Immunoglobulin G (IGG), Immunoglobulin G subclass 1 (IGG1), Immunoglobulin G subclass 2 (IGG2), Immunoglobulin G subclass 3 (IGG3), Immunoglobulin G subclass 4 (IGG4), Immunoglobulin light chains type kappa (KAPPA), Immunoglobulin light chains type lambda (LAMBDA), Immunoglobulin M (IGM), Prealbumin (PREALB), Retinol Binding Protein (RBP), specialty Albumin (sALB*), soluble Transferrin Receptor (STFR) and Transferrin (TRF).

*For serum and plasma

Dimension Vista® Protein 1 Control M and H

PROT1 CON M and PROT1 CON H are assayed, mid-level and high level, intralaboratory quality controls for assessment of precision and analytical bias on the Dimension Vista® System in the quantitative determination of: a_2-Acid Glycoprotein (A1AG), a_1 -Antitrypsin (A1AT), a_2-Macroglobulin (A2MAC), b_2 -Microglobulin (B2MIC), C3 Complement (C3), C4 Complement (C4),Ceruloplasmin (CER), Haptoglobin (HAPT), Hemopexin (HPX), Homocysteine (HCYS), Immunoglobulin A (IGA),Immunoglobulin E (IGE), Immunoglobulin G (IGG),Immunoglobulin G Subclass 1 (IGG1), Immunoglobulin G subclass 2 (IGG2), Immunoglobulin G subclass 3 (IGG3), Immunoglobulin G subclass 4 (IGG4), Immunoglobulin light chains type kappa (KAPPA), Immunoglobulin light chains type lambda (LAMBDA), Immunoglobulin M (IGM), Prealbumin (PREALB), Retinol Binding Protein (RBP),soluble Transferrin Receptor (STFR), specialty Albumin (sALB) and Transferrin (TRF).

*For serum and plasma

6. Medical device to which equivalence is claimed and comparison information:

The Dimension Vista® KAPPA Flex® reagent cartridge, Dimension Vista® PROT 1 CAL and Dimension Vista® PROT 1 CON L, M and H are substantially equivalent to the Dade Behring N Antisera to Human Immunoglobulin/L-chains assay (K860894), N/T Protein Standard SL (K012470) and N Protein Controls SL (K012468). The Dimension Vista® KAPPA assay, like Dade Behring N Antisera to Human Immunoglobulin/L-chains, kappa type assay is an *in vitro* diagnostic test for the quantitative measurement of immunoglobulin light chains, type kappa in human serum.

The Dimension Vista® LAMBDA Flex® reagent cartridge, Dimension Vista® PROT 1 CAL and Dimension Vista® PROT 1 CON L, M and H are substantially equivalent to the Dade Behring N Antisera to Human Immunoglobulin/L-chains assay (K860894), N/T Protein Standard SL (K012470) and N Protein Controls SL (K012468). The Dimension Vista® LAMBDA assay, like Dade Behring N Antisera to Human Immunoglobulin/L-chains lambda type assay is an *in vitro* diagnostic test for the quantitative measurement of immunoglobulin light chains, type lambda in human serum.

7. Device Performance Characteristics:

The Dimension Vista® KAPPA assay was compared to the Dade Behring N Antisera to Human Immunoglobulin/L-chains, kappa type assay on the BN ProSpec® System by evaluating serum samples with concentrations ranging from 31 - 863 mg/dL (0.31 - 8.63 g/L).

Regression analysis of these results yielded the following :

Comparative Method	Slope	Intercept mg/dL [g/L]	Correlation Coefficient (r)	n
Immunoglobulin/L-chains, kappa type on BN Prospec® System	1.105	- 4.2 [-0.042]	0.998	66

The Dimension Vista® LAMBDA assay was compared to the Dade Behring N Antisera to Human Immunoglobulin/L-chains, lambda type assay on the BN ProSpec® System by evaluating serum samples with concentrations ranging from 24-401 mg/dL (0.24 - 4.01g/L).

Regression analysis of these results yielded the following :

Comparative Method	**Slope**	**Intercept** **mg/dL [g/L]**	**Correlation Coefficient (r)**	**n**
Immunoglobulin/L-chains, lambda type	1.045	- 1.5 [-0.015]	0.993	66

on BN Prospec®
System

8. Conclusion:

These studies demonstrate correlation and equivalent performance between the Dade Behring N Antisera to Human Immunoglobulin/L-chains, kappa type assay and the Dimension Vista® KAPPA assay; and between the Dade Behring N Antisera to Human Immunoglobulin/L-chains, lambda type assay and the Dimension Vista® LAMBDA assay.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
2098 Gaither Road
Rockville MD 20850

DEC 19 2008

Siemens Healthcare Diagnostics
c/o Ms. Anna Marie Kathleen Ennis
Senior Regulatory Affairs and Compliance Spec.
500 GBC Drive
P.O. Box 6101
Newark, DE, 19741-6101

Re: k082503
Trade/Device Name:
Dimension Vista® KAPPA Flex® reagent cartridge
Dimension Vista® LAMBDA Flex® reagent cartridge
Dimension Vista® Protein 1 Calibrator
Dimension Vista® Protein 1 Control L
Dimension Vista® Protein 1 Control M
Dimension Vista® Protein 1 Control H
Regulation Number: 21 CFR 866.5550
Regulation Name: Immunoglobulin (Light Chain Specific) Immunological Test system
Regulatory Class: Class II
Product Code: DEH, DFH, JIX, JJY
Dated: December 4, 2008
Received: December 8, 2008

Dear Ms. Ennis:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820). This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of In Vitro Diagnostic Device Evaluation and Safety at (240) 276-0450. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at (240) 276-3474. For questions regarding the reporting of device adverse events (Medical Device Reporting (MDR)), please contact the Division of Surveillance Systems at (240) 276-3464. You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Maria M. Chan

Maria M. Chan, Ph.D.
Acting Division Director
Division of Immunology and Hematology Devices
Office of In Vitro Diagnostic Device Evaluation
and Safety
Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known): k082503

Device Name: **Dimension Vista® KAPPA Flex® reagent cartridge**

Indications For Use:

Dimension Vista® KAPPA Flex® reagent cartridge:
The KAPPA method is an *in vitro* diagnostic test for the quantitative measurement of immunoglobulin light chains, kappa type in human serum and plasma on the Dimension Vista® System. Measurement of the various amounts of the different types of light chains aids in the diagnosis of multiple myeloma (cancer of antibody-forming cells), lymphocytic neoplasms (cancer of lymphoid tissue), Waldenstrom's macroglobulinemia (increased production of large immunoglobulins), and connective tissue diseases such as rheumatoid arthritis or systemic lupus erythematosus.

Prescription Use ___X___ AND/OR Over-The-Counter-Use____
(Per 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)

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Office of In Vitro Diagnostic Device Evaluation and Safety

510(k) K082503

Indications for Use

510(k) Number (if known): k082503

Device Name: **Dimension Vista® PROT 1 CAL**

Indications For Use:

Dimension Vista® PROT 1 CAL:

PROT1 CAL is an *in vitro* diagnostic product for the calibration of the Dimension Vista® System for:

α_1-Acid Glycoprotein (A1AG)	Immunoglobulin A (IGA)
α_1-Antitrypsin (A1AT)	Immunoglobulin E (IGE)
α_2- Macroglobulin (A2MAC)	Immunoglobulin G (IGG, IGG-C*, IGG-U**)
β_2-Microglobulin (B2MIC)	Immunoglobulin G Subclass 1 (IGG1)
C3 Complement (C3)	Immunoglobulin G Subclass 2 (IGG2)
C4 Complement (C4)	Immunoglobulin G Subclass 3 (IGG3)
Ceruloplasmin (CER)	Immunoglobulin G Subclass 4 (IGG4)
Haptoglobin (HAPT)	Immunoglobulin M (IGM)
Hemopexin (HPX)	Prealbumin (PREALB)
Homocysteine (HCYS)	Retinol binding Protein (RBP)
Ig light chains, type Kappa (KAPPA)	soluble Transferrin Receptor (STFR)
Ig light chains, type Lambda (LAMBDA)	Transferrin (TRF)

*For cerebrospinal fluid (CSF)

** For urine

Prescription Use __X__ AND/OR Over-The-Counter-Use____
(Per 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)

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510(k) K 08 2503

Indications for Use

510(k) Number (if known): k082503

Device Name: **Dimension Vista® PROT 1 CON M**

Indications For Use:

PROT1 CON M is an assayed, mid-level, intralaboratory quality control for the assessment of precision and analytical bias on the Dimension Vista® System in the quantitative determination of:

α_1-Acid Glycoprotein (A1AG)	Immunoglobulin E (IGE)
α_1-Antitrypsin (A1AT)	Immunoglobulin G (IGG, IGG-C*)
α_2-Macroglobulin (A2MAC)	Immunoglobulin G Subclass 1 (IGG1)
β_2-Microglobulin (B2MIC)	Immunoglobulin G Subclass 2 (IGG2)
C3 Complement (C3)	Immunoglobulin G Subclass 3 (IGG3)
C4 Complement (C4)	Immunoglobulin G Subclass 4 (IGG4)
Ceruloplasmin (CER)	Immunoglobulin M (IGM)
Haptoglobin (HAPT)	Prealbumin (PREALB)
Hemopexin (HPX)	Retinol binding Protein (RBP)
Homocysteine (HCYS)	soluble Transferrin Receptor (STFR)
Ig light chains, type Kappa (KAPPA)	specialty Albumin (sALB)
Ig light chains, type Lambda (LAMBDA)	Transferrin (TRF)
Immunoglobulin A (IGA)	

* For serum and plasma

Prescription Use ___X___ AND/OR Over-The-Counter-Use____
(Per 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)

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Page 1 of

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Office of In Vitro Diagnostic Device Evaluation and Safety

510(k) K082503

Indications for Use

510(k) Number (if known): K082503

Device Name: **Dimension Vista® LAMBDA Flex® reagent cartridge**

Indications For Use:

Dimension Vista® LAMBDA Flex® reagent cartridge:
The LAMBDA method is an *in vitro* diagnostic test for the quantitative measurement of immunoglobulin light chains, lambda type in human serum and plasma on the Dimension Vista® System. Measurement of the various amounts of the different types of light chains aids in the diagnosis of multiple myeloma (cancer of antibody-forming cells), lymphocytic neoplasms (cancer of lymphoid tissue), Waldenstrom's macroglobulinemia (increased production of large immunoglobulins), and connective tissue diseases such as rheumatoid arthritis or systemic lupus erythematosus.

Prescription Use ___X___ AND/OR Over-The-Counter-Use____
(Per 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)

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K082503

Indications for Use

510(k) Number (if known): k082503

Device Name: **Dimension Vista® PROT 1 CON L**

Indications For Use:

PROT1 CON L is an assayed, low-level, intralaboratory quality control for the assessment of precision and analytical bias on the Dimension Vista® System in the quantitative determination of:

α_1-Acid Glycoprotein (A1AG)	Immunoglobulin E (IGE)
α_1-Antitrypsin (A1AT)	Immunoglobulin G (IGG, IGG-C*)
α_2-Macroglobulin (A2MAC)	Immunoglobulin G Subclass 1 (IGG1)
C3 Complement (C3)	Immunoglobulin G Subclass 2 (IGG2)
C4 Complement (C4)	Immunoglobulin G Subclass 3 (IGG3)
Ceruloplasmin (CER)	Immunoglobulin G Subclass 4 (IGG4)
Haptoglobin (HAPT)	Immunoglobulin M (IGM)
Hemopexin (HPX)	Prealbumin (PREALB)
Homocysteine (HCYS)	Retinol binding Protein (RBP)
Ig light chains, type Kappa (KAPPA)	soluble Transferrin Receptor (STFR)
Ig light chains, type Lambda (LAMBDA)	Specialty Albumin (sALB)
Immunoglobulin A (IGA)	Transferrin (TRF)

* For serum and plasma

Prescription Use ___X___ AND/OR Over-The-Counter-Use____
(Per 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)

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Page 1 of ___

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510(k) K082503

Indications for Use

510(k) Number (if known): k082503

Device Name: **Dimension Vista® PROT 1 CON H**

Indications For Use:

PROT1 CON H is an assayed, high -level, intralaboratory quality control for the assessment of precision and analytical bias on the Dimension Vista® System in the quantitative determination of:

α_1-Acid Glycoprotein (A1AG)	Immunoglobulin E (IGE)
α_1-Antitrypsin (A1AT)	Immunoglobulin G (IGG, IGG-C*)
α_2-Macroglobulin (A2MAC)	Immunoglobulin G Subclass 1 (IGG1)
β_2-Microglobulin (B2MIC)	Immunoglobulin G Subclass 2 (IGG2)
C3 Complement (C3)	Immunoglobulin G Subclass 3 (IGG3)
C4 Complement (C4)	Immunoglobulin G Subclass 4 (IGG4)
Ceruloplasmin (CER)	Immunoglobulin M (IGM)
Haptoglobin (HAPT)	Prealbumin (PREALB)
Hemopexin (HPX)	Retinol binding Protein (RBP)
Homocysteine (HCYS)	soluble Transferrin Receptor (STFR)
Ig light chains, type Kappa (KAPPA)	specialty Albumin (sALB)
Ig light chains, type Lambda (LAMBDA)	Transferrin (TRF)
Immunoglobulin A (IGA)	

* For serum and plasma

Prescription Use ___X___ (Per 21 CFR 801 Subpart D) AND/OR Over-The-Counter-Use____ (21 CFR 801 Subpart C)

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