Local Coverage Article:
Billing and Coding: MolDX: Blood Product Molecular Antigen Typing (A57124)

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Contractor Information

CONTRACTOR NAME	CONTRACT TYPE	CONTRACT NUMBER	JURISDICTION	STATE(S)
Noridian Healthcare Solutions, LLC	A and B MAC	01111 - MAC A	J - E	California - Entire State
Noridian Healthcare Solutions, LLC	A and B MAC	01112 - MAC B	J - E	California - Northern
Noridian Healthcare Solutions, LLC	A and B MAC	01182 - MAC B	J - E	California - Southern
Noridian Healthcare Solutions, LLC	A and B MAC	01211 - MAC A	J - E	American Samoa Guam Hawaii Northern Mariana Islands
Noridian Healthcare Solutions, LLC	A and B MAC	01212 - MAC B	J - E	American Samoa Guam Hawaii Northern Mariana Islands
Noridian Healthcare Solutions, LLC	A and B MAC	01311 - MAC A	J - E	Nevada
Noridian Healthcare Solutions, LLC	A and B MAC	01312 - MAC B	J - E	Nevada
Noridian Healthcare Solutions, LLC	A and B MAC	01911 - MAC A	J - E	American Samoa California - Entire State Guam Hawaii Nevada Northern Mariana Islands

Article Information

General Information

Article ID
A57124

Article Title
Billing and Coding: MolDX: Blood Product Molecular Antigen Typing

Article Type
Billing and Coding

AMA CPT / ADA CDT / AHA NUBC Copyright Statement

Original Effective Date
12/06/2020

Revision Effective Date
12/06/2020

Revision Ending Date
N/A

Retirement Date
N/A

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CMS National Coverage Policy

Title XVIII of the Social Security Act, §1833(e), prohibits Medicare payment for any claim lacking the necessary documentation to process the claim.

Article Guidance

Article Text:

The information in this article contains billing, coding or other guidelines that complement the Local Coverage Determination (LCD) for MolDX: Blood Product Molecular Antigen Typing.

Blood product antigen typing is a germline test and the use of panels 0001U and 0084U will be limited to once in a beneficiary lifetime.

The individual codes 0180U-0201U, 0221U, 0222U and codes 81105-81112 are also germline tests. These will be noncovered as multiple antigens must be utilized as part of a comprehensive antigen evaluation and will be considered only as part of a panel.

To report a Blood Product Molecular Antigen Typing service, please submit the following claim information:

- Select PLA code
- Enter unit of service (UOS)
- Enter the appropriate DEX Z-Code™ identifier adjacent to the CPT code in the comment/narrative field for the following Part B claim field/types:
    - Loop 2400 or SV101-7 for the 5010A1 837P
    - Item 19 for paper claim
- Enter the appropriate DEX Z-Code™ identifier adjacent to the CPT code in the comment/narrative field for the following Part A claim field/types:
    - Line SV202-7 for 837I electronic claim
    - Block 80 for the UB04 claim form
- Select the appropriate ICD-10-CM code

Coding Information

CPT/HCPCS Codes

Group 1 Paragraph:

The use of 81403 does not automatically imply coverage

Group 1 Codes:

CODE	DESCRIPTION
81403	MOLECULAR PATHOLOGY PROCEDURE, LEVEL 4 (EG, ANALYSIS OF SINGLE EXON BY DNA SEQUENCE ANALYSIS, ANALYSIS OF >10 AMPLICONS USING MULTIPLEX PCR IN 2 OR MORE INDEPENDENT REACTIONS, MUTATION SCANNING OR DUPLICATION/DELETION VARIANTS OF 2-5 EXONS)
0001U	RED BLOOD CELL ANTIGEN TYPING, DNA, HUMAN ERYTHROCYTE ANTIGEN GENE ANALYSIS OF 35 ANTIGENS FROM 11 BLOOD GROUPS, UTILIZING WHOLE BLOOD, COMMON RBC ALLELES REPORTED
0084U	RED BLOOD CELL ANTIGEN TYPING, DNA, GENOTYPING OF 10 BLOOD GROUPS WITH PHENOTYPE PREDICTION OF 37 RED BLOOD CELL ANTIGENS

Group 2 Paragraph:

These codes are non-covered

Group 2 Codes:

CODE	DESCRIPTION
81105	HUMAN PLATELET ANTIGEN 1 GENOTYPING (HPA-1), ITGB3 (INTEGRIN, BETA 3 [PLATELET GLYCOPROTEIN IIIA], ANTIGEN CD61 [GPIIIA]) (EG, NEONATAL ALLOIMMUNE THROMBOCYTOPENIA [NAIT], POST-TRANSFUSION PURPURA), GENE ANALYSIS, COMMON VARIANT, HPA-1A/B (L33P)
81106	HUMAN PLATELET ANTIGEN 2 GENOTYPING (HPA-2), GP1BA (GLYCOPROTEIN IB [PLATELET], ALPHA POLYPEPTIDE [GPIBA]) (EG, NEONATAL ALLOIMMUNE THROMBOCYTOPENIA [NAIT], POST-TRANSFUSION PURPURA), GENE ANALYSIS, COMMON VARIANT, HPA-2A/B (T145M)
81107	HUMAN PLATELET ANTIGEN 3 GENOTYPING (HPA-3), ITGA2B (INTEGRIN, ALPHA 2B [PLATELET GLYCOPROTEIN IIB OF IIB/IIIA COMPLEX], ANTIGEN CD41 [GPIIB]) (EG, NEONATAL ALLOIMMUNE THROMBOCYTOPENIA [NAIT], POST-TRANSFUSION PURPURA), GENE ANALYSIS, COMMON VARIANT, HPA-3A/B (I843S)
81108	HUMAN PLATELET ANTIGEN 4 GENOTYPING (HPA-4), ITGB3 (INTEGRIN, BETA 3 [PLATELET GLYCOPROTEIN IIIA], ANTIGEN CD61 [GPIIIA]) (EG, NEONATAL ALLOIMMUNE THROMBOCYTOPENIA [NAIT], POST-TRANSFUSION PURPURA), GENE ANALYSIS, COMMON VARIANT, HPA-4A/B (R143Q)
81109	HUMAN PLATELET ANTIGEN 5 GENOTYPING (HPA-5), ITGA2 (INTEGRIN, ALPHA 2 [CD49B, ALPHA 2 SUBUNIT OF VLA-2 RECEPTOR] [GPIA]) (EG, NEONATAL ALLOIMMUNE THROMBOCYTOPENIA [NAIT], POST-TRANSFUSION PURPURA), GENE ANALYSIS, COMMON VARIANT (EG, HPA-5A/B [K505E])
81110	HUMAN PLATELET ANTIGEN 6 GENOTYPING (HPA-6W), ITGB3 (INTEGRIN, BETA 3 [PLATELET GLYCOPROTEIN IIIA, ANTIGEN CD61] [GPIIIA]) (EG, NEONATAL ALLOIMMUNE THROMBOCYTOPENIA [NAIT], POST-TRANSFUSION PURPURA), GENE ANALYSIS, COMMON VARIANT, HPA-6A/B (R489Q)
81111	HUMAN PLATELET ANTIGEN 9 GENOTYPING (HPA-9W), ITGA2B (INTEGRIN, ALPHA

CODE	DESCRIPTION
	2B [PLATELET GLYCOPROTEIN IIB OF IIB/IIIA COMPLEX, ANTIGEN CD41] [GPIIB]) (EG, NEONATAL ALLOIMMUNE THROMBOCYTOPENIA [NAIT], POST-TRANSFUSION PURPURA), GENE ANALYSIS, COMMON VARIANT, HPA-9A/B (V837M)
81112	HUMAN PLATELET ANTIGEN 15 GENOTYPING (HPA-15), CD109 (CD109 MOLECULE) (EG, NEONATAL ALLOIMMUNE THROMBOCYTOPENIA [NAIT], POST-TRANSFUSION PURPURA), GENE ANALYSIS, COMMON VARIANT, HPA-15A/B (S682Y)
0180U	RED CELL ANTIGEN (ABO BLOOD GROUP) GENOTYPING (ABO), GENE ANALYSIS SANGER/CHAIN TERMINATION/CONVENTIONAL SEQUENCING, ABO (ABO, ALPHA 1-3-NACETYLGALACTOSAMINYLTRANSFERASE AND ALPHA 1-3-GALACTOSYLTRANSFERASE) GENE, INCLUDING SUBTYPING, 7 EXONS
0181U	RED CELL ANTIGEN (COLTON BLOOD GROUP) GENOTYPING (CO), GENE ANALYSIS, AQP1 (AQUAPORIN 1 [COLTON BLOOD GROUP]) EXON 1
0182U	RED CELL ANTIGEN (CROMER BLOOD GROUP) GENOTYPING (CROM), GENE ANALYSIS, CD55 (CD55 MOLECULE [CROMER BLOOD GROUP]) EXONS 1-10
0183U	RED CELL ANTIGEN (DIEGO BLOOD GROUP) GENOTYPING (DI), GENE ANALYSIS, SLC4A1 (SOLUTE CARRIER FAMILY 4 MEMBER 1 [DIEGO BLOOD GROUP]) EXON 19
0184U	RED CELL ANTIGEN (DOMBROCK BLOOD GROUP) GENOTYPING (DO), GENE ANALYSIS, ART4 (ADP-RIBOSYLTRANSFERASE 4 [DOMBROCK BLOOD GROUP]) EXON 2
0185U	RED CELL ANTIGEN (H BLOOD GROUP) GENOTYPING (FUT1), GENE ANALYSIS, FUT1 (FUCOSYLTRANSFERASE 1 [H BLOOD GROUP]) EXON 4
0186U	RED CELL ANTIGEN (H BLOOD GROUP) GENOTYPING (FUT2), GENE ANALYSIS, FUT2 (FUCOSYLTRANSFERASE 2) EXON 2
0187U	RED CELL ANTIGEN (DUFFY BLOOD GROUP) GENOTYPING (FY), GENE ANALYSIS, ACKR1 (ATYPICAL CHEMOKINE RECEPTOR 1 [DUFFY BLOOD GROUP]) EXONS 1-2
0188U	RED CELL ANTIGEN (GERBICH BLOOD GROUP) GENOTYPING (GE), GENE ANALYSIS, GYPC (GLYCOPHORIN C [GERBICH BLOOD GROUP]) EXONS 1-4
0189U	RED CELL ANTIGEN (MNS BLOOD GROUP) GENOTYPING (GYPA), GENE ANALYSIS, GYPA (GLYCOPHORIN A [MNS BLOOD GROUP]) INTRONS 1, 5, EXON 2
0190U	RED CELL ANTIGEN (MNS BLOOD GROUP) GENOTYPING (GYPB), GENE ANALYSIS, GYPB (GLYCOPHORIN B [MNS BLOOD GROUP]) INTRONS 1, 5, PSEUDOEXON 3
0191U	RED CELL ANTIGEN (INDIAN BLOOD GROUP) GENOTYPING (IN), GENE ANALYSIS, CD44 (CD44 MOLECULE [INDIAN BLOOD GROUP]) EXONS 2, 3, 6
0192U	RED CELL ANTIGEN (KIDD BLOOD GROUP) GENOTYPING (JK), GENE ANALYSIS, SLC14A1 (SOLUTE CARRIER FAMILY 14 MEMBER 1 [KIDD BLOOD GROUP]) GENE PROMOTER, EXON 9
0193U	RED CELL ANTIGEN (JR BLOOD GROUP) GENOTYPING (JR), GENE ANALYSIS, ABCG2 (ATP BINDING CASSETTE SUBFAMILY G MEMBER 2 [JUNIOR BLOOD GROUP])

CODE	DESCRIPTION
	EXONS 226
0194U	RED CELL ANTIGEN (KELL BLOOD GROUP) GENOTYPING (KEL), GENE ANALYSIS, KEL (KELL METALLO-ENDOPEPTIDASE [KELL BLOOD GROUP]) EXON 8
0195U	KLF1 (KRUPPEL-LIKE FACTOR 1), TARGETED SEQUENCING (IE, EXON 13)
0196U	RED CELL ANTIGEN (LUTHERAN BLOOD GROUP) GENOTYPING (LU), GENE ANALYSIS, BCAM (BASAL CELL ADHESION MOLECULE [LUTHERAN BLOOD GROUP]) EXON 3
0197U	RED CELL ANTIGEN (LANDSTEINER-WIENER BLOOD GROUP) GENOTYPING (LW), GENE ANALYSIS, ICAM4 (INTERCELLULAR ADHESION MOLECULE 4 [LANDSTEINER-WIENER BLOOD GROUP]) EXON 1
0198U	RED CELL ANTIGEN (RH BLOOD GROUP) GENOTYPING (RHD AND RHCE), GENE ANALYSIS SANGER/CHAIN TERMINATION/CONVENTIONAL SEQUENCING, RHD (RH BLOOD GROUP D ANTIGEN) EXONS 1-10 AND RHCE (RH BLOOD GROUP CCEE ANTIGENS) EXON 5
0199U	RED CELL ANTIGEN (SCIANNA BLOOD GROUP) GENOTYPING (SC), GENE ANALYSIS, ERMAP (ERYTHROBLAST MEMBRANE ASSOCIATED PROTEIN [SCIANNA BLOOD GROUP]) EXONS 4, 12
0200U	RED CELL ANTIGEN (KX BLOOD GROUP) GENOTYPING (XK), GENE ANALYSIS, XK (XLINKED KX BLOOD GROUP) EXONS 1-3
0201U	RED CELL ANTIGEN (YT BLOOD GROUP) GENOTYPING (YT), GENE ANALYSIS, ACHE (ACETYLCHOLINESTERASE [CARTWRIGHT BLOOD GROUP]) EXON 2
0221U	RED CELL ANTIGEN (ABO BLOOD GROUP) GENOTYPING (ABO), GENE ANALYSIS, NEXTGENERATION SEQUENCING, ABO (ABO, ALPHA 1-3-N-ACETYLGALACTOSAMINYLTRANSFERASE AND ALPHA 1-3-GALACTOSYLTRANSFERASE) GENE
0222U	RED CELL ANTIGEN (RH BLOOD GROUP) GENOTYPING (RHD AND RHCE), GENE ANALYSIS, NEXT-GENERATION SEQUENCING, RH PROXIMAL PROMOTER, EXONS 1-10, PORTIONS OF INTRONS 2-3

CPT/HCPCS Modifiers

Group 1 Paragraph:

N/A

Group 1 Codes:

N/A

ICD-10 Codes that Support Medical Necessity

Group 1 Paragraph:

N/A

Group 1 Codes:

ICD-10 CODE	DESCRIPTION
C85.80	Other specified types of non-Hodgkin lymphoma, unspecified site
C85.89	Other specified types of non-Hodgkin lymphoma, extranodal and solid organ sites
C85.90	Non-Hodgkin lymphoma, unspecified, unspecified site
C85.91	Non-Hodgkin lymphoma, unspecified, lymph nodes of head, face, and neck
C85.92	Non-Hodgkin lymphoma, unspecified, intrathoracic lymph nodes
C85.93	Non-Hodgkin lymphoma, unspecified, intra-abdominal lymph nodes
C85.94	Non-Hodgkin lymphoma, unspecified, lymph nodes of axilla and upper limb
C85.95	Non-Hodgkin lymphoma, unspecified, lymph nodes of inguinal region and lower limb
C85.96	Non-Hodgkin lymphoma, unspecified, intrapelvic lymph nodes
C85.97	Non-Hodgkin lymphoma, unspecified, spleen
C85.98	Non-Hodgkin lymphoma, unspecified, lymph nodes of multiple sites
C85.99	Non-Hodgkin lymphoma, unspecified, extranodal and solid organ sites
C90.00	Multiple myeloma not having achieved remission
C90.01	Multiple myeloma in remission
C90.02	Multiple myeloma in relapse
C91.00	Acute lymphoblastic leukemia not having achieved remission
C91.01	Acute lymphoblastic leukemia, in remission
C91.02	Acute lymphoblastic leukemia, in relapse
C92.60	Acute myeloid leukemia with 11q23-abnormality not having achieved remission
C92.61	Acute myeloid leukemia with 11q23-abnormality in remission
C92.62	Acute myeloid leukemia with 11q23-abnormality in relapse
C92.A0	Acute myeloid leukemia with multilineage dysplasia, not having achieved remission
C92.A1	Acute myeloid leukemia with multilineage dysplasia, in remission
C92.A2	Acute myeloid leukemia with multilineage dysplasia, in relapse
D46.C	Myelodysplastic syndrome with isolated del(5q) chromosomal abnormality
D46.Z	Other myelodysplastic syndromes
D51.0	Vitamin B12 deficiency anemia due to intrinsic factor deficiency
D53.9	Nutritional anemia, unspecified

ICD-10 CODE	DESCRIPTION
D55.0	Anemia due to glucose-6-phosphate dehydrogenase [G6PD] deficiency
D55.1	Anemia due to other disorders of glutathione metabolism
D55.2	Anemia due to disorders of glycolytic enzymes
D55.3	Anemia due to disorders of nucleotide metabolism
D55.8	Other anemias due to enzyme disorders
D55.9	Anemia due to enzyme disorder, unspecified
D56.0	Alpha thalassemia
D56.1	Beta thalassemia
D56.2	Delta-beta thalassemia
D56.3	Thalassemia minor
D56.5	Hemoglobin E-beta thalassemia
D56.8	Other thalassemias
D56.9	Thalassemia, unspecified
D57.00	Hb-SS disease with crisis, unspecified
D57.01	Hb-SS disease with acute chest syndrome
D57.02	Hb-SS disease with splenic sequestration
D57.03	Hb-SS disease with cerebral vascular involvement
D57.09	Hb-SS disease with crisis with other specified complication
D57.1	Sickle-cell disease without crisis
D57.20	Sickle-cell/Hb-C disease without crisis
D57.211	Sickle-cell/Hb-C disease with acute chest syndrome
D57.212	Sickle-cell/Hb-C disease with splenic sequestration
D57.213	Sickle-cell/Hb-C disease with cerebral vascular involvement
D57.218	Sickle-cell/Hb-C disease with crisis with other specified complication
D57.219	Sickle-cell/Hb-C disease with crisis, unspecified
D57.3	Sickle-cell trait
D57.40	Sickle-cell thalassemia without crisis
D57.411	Sickle-cell thalassemia, unspecified, with acute chest syndrome
D57.412	Sickle-cell thalassemia, unspecified, with splenic sequestration
D57.413	Sickle-cell thalassemia, unspecified, with cerebral vascular involvement
D57.418	Sickle-cell thalassemia, unspecified, with crisis with other specified complication
D57.419	Sickle-cell thalassemia, unspecified, with crisis

ICD-10 CODE	DESCRIPTION
D57.42	Sickle-cell thalassemia beta zero without crisis
D57.431	Sickle-cell thalassemia beta zero with acute chest syndrome
D57.432	Sickle-cell thalassemia beta zero with splenic sequestration
D57.433	Sickle-cell thalassemia beta zero with cerebral vascular involvement
D57.438	Sickle-cell thalassemia beta zero with crisis with other specified complication
D57.439	Sickle-cell thalassemia beta zero with crisis, unspecified
D57.44	Sickle-cell thalassemia beta plus without crisis
D57.451	Sickle-cell thalassemia beta plus with acute chest syndrome
D57.452	Sickle-cell thalassemia beta plus with splenic sequestration
D57.453	Sickle-cell thalassemia beta plus with cerebral vascular involvement
D57.458	Sickle-cell thalassemia beta plus with crisis with other specified complication
D57.459	Sickle-cell thalassemia beta plus with crisis, unspecified
D57.80	Other sickle-cell disorders without crisis
D57.811	Other sickle-cell disorders with acute chest syndrome
D57.812	Other sickle-cell disorders with splenic sequestration
D57.813	Other sickle-cell disorders with cerebral vascular involvement
D57.818	Other sickle-cell disorders with crisis with other specified complication
D57.819	Other sickle-cell disorders with crisis, unspecified
D58.0	Hereditary spherocytosis
D58.1	Hereditary elliptocytosis
D58.9	Hereditary hemolytic anemia, unspecified
D59.0	Drug-induced autoimmune hemolytic anemia
D59.10	Autoimmune hemolytic anemia, unspecified
D59.11	Warm autoimmune hemolytic anemia
D59.12	Cold autoimmune hemolytic anemia
D59.13	Mixed type autoimmune hemolytic anemia
D59.19	Other autoimmune hemolytic anemia
D59.9	Acquired hemolytic anemia, unspecified
D60.0	Chronic acquired pure red cell aplasia
D60.1	Transient acquired pure red cell aplasia
D60.8	Other acquired pure red cell aplasias
D60.9	Acquired pure red cell aplasia, unspecified

ICD-10 CODE	DESCRIPTION
D61.01	Constitutional (pure) red blood cell aplasia
D61.09	Other constitutional aplastic anemia
D61.1	Drug-induced aplastic anemia
D61.2	Aplastic anemia due to other external agents
D61.3	Idiopathic aplastic anemia
D61.89	Other specified aplastic anemias and other bone marrow failure syndromes
D63.0	Anemia in neoplastic disease
D63.1	Anemia in chronic kidney disease
D63.8	Anemia in other chronic diseases classified elsewhere
ICD-10 CODE	DESCRIPTION
D64.0	Hereditary sideroblastic anemia
D64.1	Secondary sideroblastic anemia due to disease
D64.2	Secondary sideroblastic anemia due to drugs and toxins
D64.3	Other sideroblastic anemias
D64.4	Congenital dyserythropoietic anemia
D64.89	Other specified anemias
Z85.72	Personal history of non-Hodgkin lymphomas

ICD-10 Codes that DO NOT Support Medical Necessity

N/A

Additional ICD-10 Information

N/A

Bill Type Codes:

Contractors may specify Bill Types to help providers identify those Bill Types typically used to report this service. Absence of a Bill Type does not guarantee that the policy does not apply to that Bill Type.Complete absence of all Bill Types indicates that coverage is not influenced by Bill Type and the policy should be assumed to apply equally to all claims.

N/A

Revenue Codes:

Contractors may specify Revenue Codes to help providers identify those Revenue Codes typically used to report this service. In most instances Revenue Codes are purely advisory. Unless specified in the policy, services reported under other Revenue Codes are equally subject to this coverage determination. Complete absence of all Revenue Codes indicates that coverage is not influenced by Revenue Code and the policy should be assumed to apply equally to all Revenue Codes.

N/A

Other Coding Information

Group 1 Paragraph:

N/A

Group 1 Codes:

N/A

Revision History Information

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION
12/06/2020	R1	Under **CPT/HCPCS Codes Group 2: Codes** added 0221U and 0222U. This revision is due to the Q4 CPT®/HCPCS Code Update.

Associated Documents

Related Local Coverage Document(s)

LCD(s)
L38331 - MolDX: Blood Product Molecular Antigen Typing
DL38331 - MolDX: Erythrocyte Molecular Antigen Typing

Related National Coverage Document(s)

N/A

Statutory Requirements URL(s)

N/A

Rules and Regulations URL(s)

N/A

CMS Manual Explanations URL(s)

N/A

Other URL(s)

N/A

Public Version(s)

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N/A