Thermo SCIENTIFIC

KingFisher® Flex process with 24 magnet head and KF Flex 24 DNA Blood Reagents (96) for DNA isolation from 1 ml of whole blood (Qiagen)

Sample process

1. Fill the plates according to the **Table 1**. More information about the reagents in the KF Flex 24 DNA Blood Reagents (96) Handbook, Qiagen, catalog no. **940065**.

Plate number	Plate type	Plate name	Content	Sample/reagent volume
1	KingFisher Flex 24 deep well plate	Lysis / Binding	Buffer AL Blood Protease K	1000 µl 1000 µl 100 µl
Dispense step, add...				
1			Isopropanol MagAttract suspension G	1000 µl 150 µl
2	KingFisher Flex 24 deep well plate	Wash 1 MW1	Buffer MW1	3000 µl
3	KingFisher Flex 24 deep well plate	Wash 2 MW1	Buffer MW1	3000 µl
4	KingFisher Flex 24 deep well plate	Wash 3 AW2	Buffer AW2	3000 µl
5	KingFisher Flex 24 deep well plate	Wash 4 AW2	Buffer AW2	3000 µl
6	KingFisher Flex 24 deep well plate	Aqua 0.02% tw20	Rnase Free water 0.02% Tween 20	3000 µl
7	KingFisher Flex 24 deep well plate	Elution	Elution Buffer BN	500 µl
8	KingFisher Flex 24 deep well plate	Tip Plate		

Table 1. Filling the plates for 1 ml blood DNA isolation

Start the **"Qiagen_ DNABlood1000_Flex24**" protocol using **arrow keys** and **START** button. You can also run the protocol using a computer, for more details see BindIt software user manual .

2. Load the plates according to the protocol request and press **START** after every plate to confirm the action. Use KingFisher Flex 24 deep well tip comb and plate for tip loading.

   Note! Confirm that the plates are placed in correct orientation: A1 well to be pointed to upper right corner of the plate holder in turntable. A1 row of the plate is then always located in the inner circle of the turntable.

3. The purification protocol will start when the last plate is loaded and **START** button is pressed.
4. **Dispense step**: After lysis add 150 µl of resuspended MagAttract suspension G and 1000 µl of isoropanol to plate **1**. Beads and isopropanol may be premixed before addition to plate 1.
5. After the purification process is completed the plates are removed according to instructions shown in the instrument screen. Press **START** after each plate removal to confirm the action.
6. When the last plate is removed text End of run will appear. Press **STOP** to complete the run.

Note! For the rapid protocol **Qiagen_ DNABlood1000r_Flex24**, fill in the same volumes of all the reagents (Protease K, Buffer AL, Isopropanol, MagAttract Suspension G) and the sample on the Plate 1 before the run. No dispense step in the protocol.

KingFisher® Flex process with 24 magnet head and KF Flex 24 DNA Blood Reagents (96) for DNA isolation from 1.5 ml of whole blood (Qiagen)

Sample process

1. Fill the plates according to the **Table 1**. More information about the reagents in the KF Flex 24 DNA Blood Reagents (96) Handbook, Qiagen, catalog no. **940065**.

Plate number	Plate type	Plate name	Content	Sample/reagent volume
1	KingFisher Flex 24 deep well plate	Lysis / Binding	Buffer AL Blood Protease K	1500 µl 1500 µl 150 µl
Dispense step, add...				
1			Isopropanol MagAttract suspension G	1500 µl 150 µl
2	KingFisher Flex 24 deep well plate	Wash 1 MW1	Buffer MW1	4000 µl
3	KingFisher Flex 24 deep well plate	Wash 2 MW1	Buffer MW1	4000 µl
4	KingFisher Flex 24 deep well plate	Wash 3 AW2	Buffer AW2	4000 µl
5	KingFisher Flex 24 deep well plate	Wash 4 AW2	Buffer AW2	4000 µl
6	KingFisher Flex 24 deep well plate	Aqua 0.02% tw20	Rnase Free water 0.02% Tween 20	3000 µl
7	KingFisher Flex 24 deep well plate	Elution	Elution Buffer BN	500 µl
8	KingFisher Flex 24 deep well plate	Tip Plate		

Table 2. Filling the plates for 1.5 ml blood DNA isolation

Start the **"Qiagen_ DNABlood1500_Flex24**" protocol using **arrow keys** and **START** button. You can also run the protocol using a computer, for more details see BindIt software user manual.

2. Load the plates according to the protocol request and press **START** after every plate to confirm the action. Use KingFisher Flex 24 deep well tip comb and plate for tip loading.

   Note! Confirm that the plates are placed in correct orientation: A1 well to be pointed to upper right corner of the plate holder in turntable. A1 row of the plate is then always located in the inner circle of the turntable.

3. The purification protocol will start when the last plate is loaded and **START** button is pressed.
4. **Dispense step**: After lysis add 150 µl of resuspended MagAttract suspension G and 1500 µl of isoropanol to plate **1**. Beads and isopropanol may be premixed before addition to plate 1.
5. After the purification process is completed the plates are removed according to instructions shown in the instrument screen. Press **START** after each plate removal to confirm the action.
6. When the last plate is removed text End of run will appear. Press **STOP** to complete the run.

Note! For the rapid protocol **Qiagen_ DNABlood1500r_Flex24**, fill in the same volumes of all the reagents (Protease K, Buffer AL, Isopropanol, MagAttract Suspension G) and the sample on the Plate 1 before the run. No dispense step in the protocol.