Isolation of: **Genomic DNA**

for detection of: **Human target genes**

Sample Type: Formalin-fixed paraffin-embedded (FFPE) tissue

Kit: RSC DNA FFPE Kit AS1450

Sample preparation:

1.) Transfer your material (5 - 10 µm thick FFPE sections, max. 2 mm^3) into a suitable microtube and overlay it with **450 µl** of mineral oil and vortex for 10 s.

2.) Incubate the sample 2 min at 80°C and place the sample at room temperature.

3.) Meanwhile, prepare the following Master Mix:

	Per Sample	*n Samples*
Lysis Buffer	**224 µl**	**224 x (n+2) µl**
Proteinase K-Solution	**25 µl**	**25 x (n+2) µl**
Blue Dye	**1 µl**	**1 x (n+2) µl**

Note: For n = 1 – 5 n+1 preparations are sufficient.
Use the Master Mix within 1 hour of preparation, do not store.

4.) Add **250 µl** Master Mix to the sample and vortex some seconds

5.) Centrifuge the sample 20 s at 10.000 × g to separate layers. If a pellet is present in the aqueous layer (lower, blue layer), gently mix aqueous phase by pipetting to resuspend the pellet.

6.) Incubate the sample overnight at 56°C and subsequently for 30 min at 80°C.
Alternative: Depending on the type and age of the FFPE samples an incubation at 70°C overnight might be beneficial.

7.) Remove the sample tubes from the heat block, and allow the samples to cool to room temperature for 5 minutes.

8.) Pipet 10 µl RNase A-Solution into the aqueous phase and mix by pipetting.

9.) Incubate the samples for 5 min at room temperature. Meanwhile, prepare the cartridges (see Extraction 1.-3.)

10.) Centrifuge 5 min at full speed in a microcentrifuge.

Extraction:

1.) Place the cartridge to be used into the Maxwell cartridge rack and remove the seal.

2.) Place one of the supplied elution tubes into the sample rack and add **50 – 100 µl** of the supplied elution buffer (see (1)).

3.) Place the plunger in the indicated position of the cartridge (see (2)).

4.) Transfer the whole aqueous phase into well 1 of the Maxwell cartridge (see (3)). Do not transfer eventually remaining paraffin of the sample tube into the Maxwell rack!

5.) Select the appropriate program for the **DNA FFPE Kit** and start the run.

6.) After the extraction your sample is ready-to-use for your downstream applications.