

Product **REMBRANDT® aDIG-AP Fab conjugate**
REMBRANDT® aDIG-HRP Fab conjugate
REMBRANDT® aBIO-AP Fab conjugate
REMBRANDT® aBIO-HRP Fab conjugate

Code **R003R.0000, R004R.0000, R041R.0000, R042R.0000**

Technical specifications

Cat. No.	Description	Contents	Format	Appearance	Activity
R003R.0000	REMBRANDT® Sheep anti digoxigenin-alkaline phosphatase conjugate ; Fab fragments; (CONJ DIG-AP)	15 ml (100 tests), clear vial, red cap	Ready to use	Clear liquid	Approx. 2 units/mL; 1 unit hydrolyses 1 umole of p-nitrophenyl phosphate per minute at pH 9.8 at 37 °C
R004R.0000	REMBRANDT® Sheep anti digoxigenin-horseradish peroxidase conjugate; Fab fragments; (CONJ DIG-HRP)	15 ml (100 tests), clear vial, red cap	Ready to use	Clear liquid	Approx. 2 units/mL; 1 unit forms 1 mg purpurogallin in 20 seconds from pyrogallol at pH 6.0 at 20 °C
R041R.0000	REMBRANDT® Goat anti biotin-alkaline phosphatase conjugate; Fab fragments; (CONJ BIO-AP)	15 ml (100 tests), clear vial, red cap	Ready to use	Clear liquid	Approx. 2 units/mL; 1 unit hydrolyses 1 umole of p-nitrophenyl phosphate per minute at pH 9.8 at 37 °C
R042R.0000	REMBRANDT® Goat anti biotin-horseradish peroxidase conjugate; Fab fragments; (CONJ BIO-HRP)	15 ml (100 tests), clear vial, red cap	Ready to use	Clear liquid	Approx. 2 units/mL; 1 unit forms 1 mg purpurogallin in 20 seconds from pyrogallol at pH 6.0 at 20 °C

Format : ready to use **RTU**

Application : Conjugated antibodies for detection and visualisation of digoxigenin or biotin labelled DNA or RNA probes in immunohistochemical (IHC) or *in situ* hybridisation (ISH) reactions

Performance : 3.2 pg nucleic acids (labelled), checked by direct spot blot

Purification : affinity chromatography

Storage : refrigerated (2-8 °C); do not freeze

Stability : until expiry date printed on label

Precautions : homogenise solutions before use

harmful: avoid contact with eyes and skin; do not swallow



Related products

Product code	Product	Amount
R001R.0000	REMBRANDT® Mouse aBIO	3 ml
R002R.0000	REMBRANDT® Mouse aDIG	3 ml
R009R.0000	REMBRANDT® Goat aMouse-HRP polymer conjugate	3 ml
R012R.0000	REMBRANDT® Goat aRabbit-AP polymer conjugate	3 ml

Please contact your local supplier for further information.

Limitations of Procedure

Product Conjugates

- The REMBRANDT® Conjugates are for research use only and are solely applicable detection and visualisation of hybridised biotin or digoxigenin labelled DNA or RNA probes in immunohistochemical or *in situ* hybridisation (ISH) reactions, which may be present in cell preparations (paraffin sections, frozen sections or cytological specimen).
- Either human tissue sections or human cytological preparations may be used. Samples must be fixed in buffered formalin or alcohol. In tissue sections are required, the sections should be prepared in a 4 µm thickness. Furthermore, the tissues should be glued to the glass slides with a bio-adhesive (e.g. organ silane), dried at room temperature, subsequently dried at 37 °C overnight and lastly completely deparaffinized in xylene and alcohol series and air dried. Many factors can influence the performance of the IHC/ISH procedure. Failure in detection can be due to i.e. improper sampling, handling, the time lapse between tissue removal and fixation, the size of the tissue specimen in the fixation medium, the fixation time, processing fixed tissue, the thickness of the section, the bio-adhesive on the slide, deparaffinisation procedure, incubation times, incubation temperatures, all other reagents (i.e. deparaffinisation reagents, proteolytic treatment, probes etc.) used in the procedure and interpretation of results.
- Cytological specimen should be prepared as required by the user, fixed with cytological fixation agent, rinsed in distilled water prior to the IHC procedure and air dried.

- Many factors can influence the performance of the IHC procedure. Failure in detection can be due to i.e. improper sampling, handling, the time lapse between tissue removal and fixation, the size of the tissue specimen in the fixation medium, the fixation time, processing fixed tissue, the thickness of the section, the bio-adhesive on the slide, deparaffinisation procedure, epitope retrieval methods, incubation times, detection reagents, incubation temperatures and interpretation of results.
- The performance of the IHC procedure is also affected by the sensitivity of the method and the presence of target sequences; in case the limit of the sensitivity is reached or when the target DNA or RNA load is too low, a false negative reaction may be the result.
- The REMBRANDT® Conjugates test results are not to be relied on in case the sampling, sampling method, quality, sample preparation, other reagents used, controls and procedure followed is not optimal.
- Laboratory personnel performing the test should be knowledgeable and be able to interpret the test results.

Recommended usage

The REMBRANDT® Conjugates are recommended for usage as an antibody in an IHC or ISH reaction. The REMBRANDT® Conjugates are ready to use.

Recommend protocol

Appropriate epitope retrieval methods should have been applied to the specimen before incubation with the antibodies.

1. Apply 3 drops of RTU REMBRANDT® Conjugated antibodies to the sample and incubate at 37 °C for 30 minutes
2. Wash the sample 3x 1 min in TBS or PBS
3. Continue with detection via a chromogen-substrate reaction or fluorescent detection.

Interpretation of the results

The REMBRANDT® Conjugates are not able to directly visualize an assay result. For the detection of the conjugate, a corresponding detection system should be used (see production in combination with other devices or contact your local distributor). It is recommended to always use positive and negative control samples within the IHC assay.

First, check the negative and positive controls that have been incubated with the test slides simultaneously:

- The negative control should be really negative, i.e. not show any localised colour precipitations. If the negative control could be interpreted as being positive, discard the results since no conclusions can be drawn.
- The positive control should show colour precipitations in conformity with the localisation of the target DNA or RNA. The colour should show the proper shade and must be clearly visible in the preferential cell/ tissue type and correspond to the target localisation.

In the test slides, start under low power magnification and focus on localisation and colour to see whether:

- The positivity (colour precipitation) observed is localised in the cell type preferred by the target DNA or RNA.
- The colour has the right shade (no endogenous or formalin pigment).

Product in combination with other devices

The REMBRANDT® Conjugates can be used in combination with the REMBRANDT® NBT/BCIP chromogen substrate (R008R.0000), and the REMBRANDT® AEC chromogen substrate (R010R.0000). Other detection system for HRP or AP are compatible with the REMBRANDT® Conjugates.

References

1. Chalet, L. and Wolf, F., *Arch. Biochem. Biophys.*, 106, 1 (1964).
2. Green, N.M., *Meth. Enzymol.*, 18A, 418 (1970)

Purchase does not include the right to exploit this product commercially and any commercial use without the explicit authorization of PanPath B.V. is prohibited.