

FREE CHECKLIST

COA Red Flags Checklist

How to spot a weak or fake certificate of analysis.

A purity percentage is one result for one sample. Use this list to see what the file does not show. It is a reading aid for research certificates. It is not a quality guarantee, and it is not medical advice.

TEN CHECKS

☐ 01 **No lab name or contact**

The file never names a laboratory, or it shows a logo with no address, phone, or email. If you cannot tell who ran the test, you cannot ask them to confirm it.

☐ 02 **No report or accession number**

There is no report number, accession number, or sample ID. Without one, the lab has nothing to look up.

☐ 03 **Lot number doesn't match the vial**

The lot or batch is missing, or it is not the same number printed on the vial and on the product page for that unit.

☐ 04 **Missing test dates**

There is no date received and no date reported. An undated file can belong to another year or another run.

☐ 05 **Purity with no method**

A purity percent is printed and the method is blank. Look for a named method such as HPLC or UPLC-MS beside the number.

☐ 06 **No identity or mass confirmation**

Purity is stated, and nothing confirms identity, such as mass spectrometry or a reported mass. A high percent can describe the wrong compound.

TEN CHECKS, CONTINUED

☐ 07 No endotoxin or sterility data where claimed

If the certificate or the product page says endotoxin or sterility was tested, the file should name the method and the result. A blank section is not a pass.

☐ 08 Supplier-hosted only, with no lab verify link

The PDF lives only on the supplier's website. There is no link to the same report on the laboratory's own site.

☐ 09 Reused or edited-looking PDF

The same file is attached to many products, figures look pasted over a scan, fonts change mid-line, or the header disagrees with the table.

☐ 10 Chromatogram that doesn't match the claim

The chromatogram is missing, cropped through the baseline, or the peak labels do not match the compound and the purity written in the table.

HOW TO VERIFY AT THE LAB

A file on a product page is a copy. The check is whether the laboratory can show you the same record.

1 Laboratory	2 Report number	3 Lot or batch	4 Compound
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- 1 Copy the laboratory name, the report or accession number, and the lot number from the file.
- 2 Open the laboratory's own website and look for a verify, COA, or report lookup page.
- 3 Search that report or accession number and confirm the lab shows the same record.
- 4 Match four fields: laboratory, report or accession number, lot or batch, and compound name.
- 5 Match the dates on the file, including received and reported when they are printed.
- 6 Read the method named next to any purity result.
- 7 If there is no public lookup, use the contact printed on the certificate and ask the lab to confirm that report number. A seller's screenshot is not the same thing.
- 8 Stop there. One matched report is one sample, not a whole catalog.

Mark a box when the file fails that check. A clean-looking purity number can still sit on a weak certificate.