bioactiva diagnostica
The Partner That Cares

# FD THAK/THDC ELISA

**ELISA for the determination of total histamine degradation capacity in human serum**

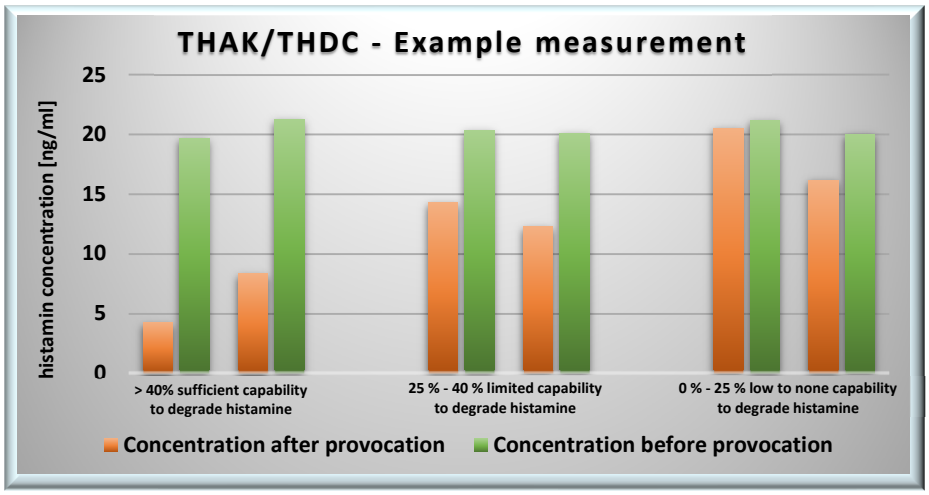
Histamine is degraded by diaminooxidase (DAO) and histamine N-methyltransferase (HNMT). The current scientific status is that in the intestine and in the blood mainly the DAO is present, while the HNMT works more cellularly. One hypothesis is that the concentration in blood and intestine correlate. However, various scientific research groups doubt this. It could as well be possible that other yet unknown degradation or neutralization reactions are taking place in the blood.

Our newly developed **FD THAK/THDC ELISA** measures the total degradation capacity of histamine in serum independently of how the histamine is degraded. Here, it is not the enzyme activity that is measured, but rather how much histamine is degraded on a sample-specific basis.

Previous methods only could detect a degradation of histamine in the patient under clinical symptoms. In most cases, the patient had to be provoked with histamine-containing foods, or histamine-containing infusion solutions, in order to diagnose histamine intolerance. Capturing the patient in the correct measurement period is very problematic and fraught with risks.

You will find in our Elisa an optimal ratio between histamine and sample. It is known that if the histamine concentration is too high, which however does not occur physiologically (except possibly in anaphylactic shock), the DAO can only show reduced activity due to substrate inhibition. The rate of the degradation reaction is also different for each sample. Low concentrations of histamine in the sample matrix may be degraded or adsorptively bound by pathological factors, resulting in erroneous diagnostic conclusions. Also, each sample has a different intrinsic histamine content. Therefore, each individual sample is diagnosed on a patient-specific basis.

With our patented **FD THAK/THDC ELISA** the total histamine degradation capacity of the patient is determined without the patient having to have symptoms. There is no need for provocation on the patient, the patient can even eat a histamine-free diet. All factors of histamine degradation are included.
In our test, the patient's serum is provoked during the test and sample-specific histamine degradation is measured in each patient sample





## Symptoms:

- Gastrointestinal complaints
- abdominal cramps, diarrhea
- Headache, migraine
- Reddening of the skin
- Rashes
- Itching
- rhinitis
- Pain in the limbs
- leaden fatigue


## Advantages:

- Provocation of the specimen, not the patient
- Patient can be symptom-free Diagnostics possible despite histamine-free diet
- One patient sample
  Measurement BEFORE and AFTER provocation, without taking a second sample
- Two billable histamine determinations per patient. Histamine concentration measurement BEFORE and AFTER provocation as well as the total percentage degradation capacity
- Stability THAK in the serum sample both during transport and storage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