

Aug 04, 2025

## Clinical Blink Reflex

DOI

<https://dx.doi.org/10.17504/protocols.io.ewov1mpj7vr2/v1>

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PRECISION Human Pain ...



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**Protocol Citation:** Oumie Thorell, Dorota Persson 2025. Clinical Blink Reflex. **protocols.io**  
<https://dx.doi.org/10.17504/protocols.io.ewov1mpj7vr2/v1>

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**Protocol status:** Working

**We use this protocol and it's working**

**Created:** June 03, 2025

**Last Modified:** August 04, 2025

**Protocol Integer ID:** 219469

**Keywords:** Blink reflex, clinical blink reflex clinical protocol, blink reflex threshold, blink reflex, clinical technique, protocol, guidelines from linköping university hospital, guideline

## Abstract

Clinical protocol to evoke the blink reflex. This protocol describes how to define blink reflex thresholds, following the clinical technique and guidelines from Linköping University Hospital.

## Attachments



ClinicalBlinkReflex....

49KB

## Materials

EDX Base Unit, Natus Neurology Incorporated, Middletown, USA.

Natus Elite - Synergy. Version 22.4.1.123. 2020. Natus Medical Incorporated. Middletown,USA.

Neruoline Ground electrode. Ambu Sdn. Bhd. Penang, Malaysia

Neurology surface electrodes. AMBU neuroline 700, AMBU snd. Bhd. Penang, Malaysia

Disc electrode, GVB-gelIMED, Germany.

## Safety warnings

 This protocol describes the use of electrical current applied to the skin of individuals. Approved equipment intended for electrical use on humans should be used in this protocol. The equipment should be handled by trained personnel only to ensure the safety of the individuals who are exposed to the electrical currents.

## Ethics statement

The original ethics application with file number 2024-01267-01 was approved on 03/04/2024 by the Swedish Ethical Review Authority. The application for amendment was received by the Ethics Review Authority on July 8, 2024, and became valid on July 11, 2024.

## Clinical Blink Reflex

- 1 Start Natus Elite - Synergy EMG software program.
- 2 Choose the protocol named "Blinkreflex". Choose "New nerve" and side (right or left eye).
- 3 The subject should be placed comfortable in a seated or supine position. Place the ground electrode in the middle of the forehead on the subject.
- 4 Place the anode on the orbicularis oculi muscle under the eye. Place the cathode on the orbicularis oculi muscle at the outer corner of the eye.
- 5 Place the stimulating electrode against the orbital nerve at the eyebrow.
- 6 To electrically stimulate, press the "Switch" button.
- 7 Start with a low stimulus intensity of 1mA and slowly increase in 1mA increments until a blink reflex can be visualized. Wait randomly for at least 20s in-between stimuli to evoke a surprising effect.
- 8 Repeat the stimulus at reflex intensity 3 times.
- 9 The stimulus intensity at which a reflex can be successfully evoked 3 times, is taken as the Nociceptive withdrawal reflex threshold.
- 10 Mark latency onset.