



National Centre
for the Replacement
Refinement & Reduction
of Animals in Research

Grimace Scale Posters: Terms of use

The NC3Rs has produced A3-sized posters of the mouse, rabbit and rat grimace scales for display in laboratory animal facility rooms and corridors to help raise awareness about the scales and familiarise staff with the specific facial action units.

For a full list of available posters and information on and how to implement grimace scales in your facility please see our resource page: <https://www.nc3rs.org.uk/3rs-resources/grimace-scales/>.

Print specifications

The proper use of this poster requires each of the facial action units to be clear and easily discernible, therefore it must be printed by a professional print service at the full A3 size.

This poster in this pdf has been setup to professional print standards and has crops and bleed added. Please use the print specification outlined below and the printer will trim the poster to the finished size.

- Finished Size: 420mm x 297mm (A3 portrait)
- Print specification: Full colour
- Paper specification (ideally): 170gsm silk

If you have any issues, or need the file in another format, please contact enquiries@nc3rs.org.uk.

Circulation and reproduction

The poster in this PDF should not be circulated without this covering page attached to it.

Any requests to reproduce this poster, or to include it in any publications or training materials, should be directed to enquiries@nc3rs.org.uk. You should include how, why and where the poster will be used so that we can consider your case for approval. It is helpful to include any associated text, so we can see the context in which the poster will be put.

Copyright: The attached poster and the content within it are owned by the NC3Rs and its partners. The poster should not be adapted, and the content should not be sold or used to generate income.

小鼠痛苦表情评分

研究表明面部表情的改变可以作为评估小鼠疼痛的一种方法。

以下所显示的特有的面部行为单位被用来制定小鼠痛苦表情分级。这些行为单位的程度随处理后疼痛反应而增加，可以作为临床评估的一部分。

行为单位仅用于清醒动物，每一个动物应观察足够长的时间，以避免将与动物福利无关的简短的面部表情变化纳入评分。

	没呈现“0”	中度呈现“1”	明显呈现“2”
眼窝发紧 <ul style="list-style-type: none"> ▪ 眼睑闭合 (眼窝面积变窄) ▪ 眼周可能看到一皱纹 			
鼻子隆起 <ul style="list-style-type: none"> ▪ 顺鼻梁隆起 ▪ 鼻旁现垂直皱纹 			
面颊鼓起 <ul style="list-style-type: none"> ▪ 鼓起的面颊 			
耳朵姿势 <ul style="list-style-type: none"> ▪ 耳朵向外旋转和/或向后转，离开脸部 ▪ 耳朵可能折成‘尖点’状 ▪ 耳朵间距离增大 			
胡须变化 <ul style="list-style-type: none"> ▪ 胡须顺着面颊后拖，或前拖至‘尾端立起’ ▪ 胡须可能成束 ▪ 胡须失去它们自然向下的曲线 			

阅读原文献：

Langford DJ, Bailey AL, Chanda ML, Clarke SE, Drummond TE, Echols S, Glick S, Ingrao J, Klassen-Ross T, LaCroix-Fralish ML, Matsumiya L, Sorge RE, Sotocinal SG, Tabaka JM, Wong D, van den Maagdenberg AMJM, Ferrari MD, Craig KD, Mogil JS. 2010. Coding of facial expressions of pain in the laboratory mouse. Nature Methods 7(6): 447-449. doi:10.1038/nmeth.1455

就指导关于如何应用小鼠痛苦表情计分，这一技术的基础和有效性的科研文章，以及它在其它动物种类的使用，请访问：www.nc3rs.org.uk/grimacescales 如需求这个海报的复印件，请发电子邮件：enquiries@nc3rs.org.uk NC3Rs 提供相关3Rs 资源于：www.nc3rs.org.uk/resources

图片由Jeffrey Mogil博士友情提供