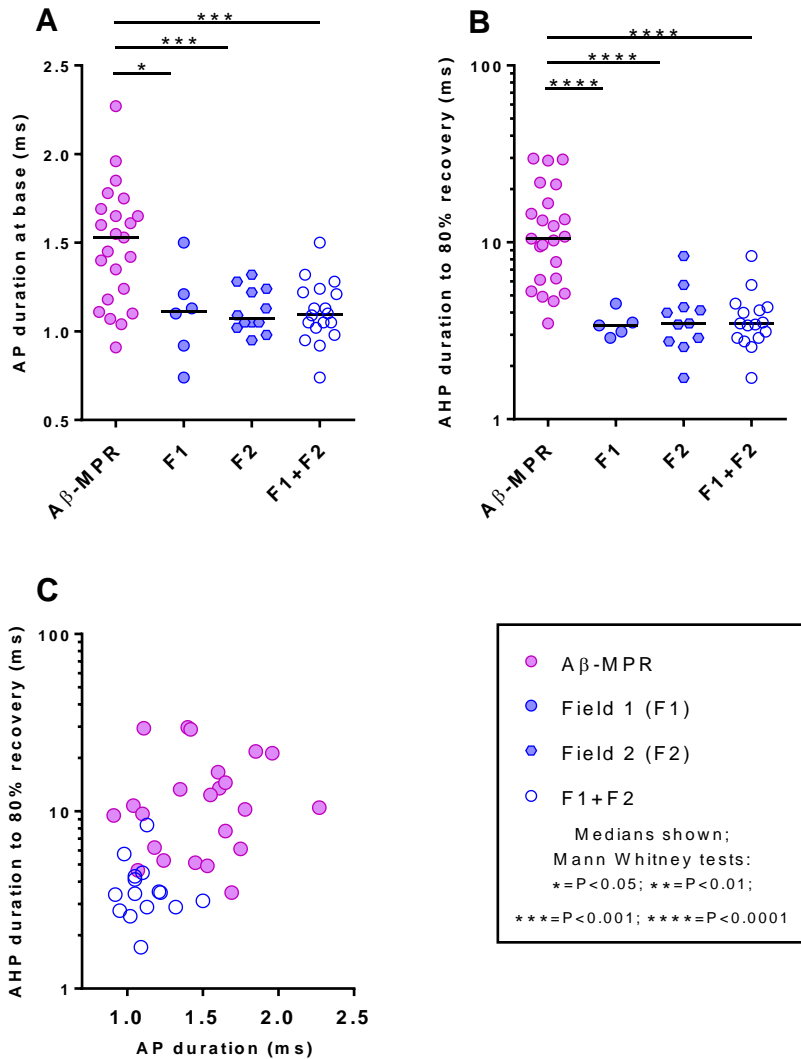


Are Field-A $\alpha$ -LTMRs and A $\beta$ -MPRs the same neurons?



### Supplementary Figure 1:

Title: **Are Field A $\alpha$ -low threshold mechanoreceptors (Field-A $\alpha$ -LTMRs) and A $\beta$ -nociceptors that are moderate pressure receptors (A $\beta$ -MPRs) the same group of afferents?**

These are all the units from the Bristol Data Set that were recorded with intracellular electrodes filled with KCl, 1M or 3M, that had a membrane potential of at least -40mV, an overshooting action potential and fitted the criteria for identification of these two groups (see main paper). The records were of dorsal root evoked somatic APs recorded intracellularly in identified A $\beta$ -nociceptors that were MPRs (red/pink) and in Field A $\alpha$ -LTMRs types 1 and 2 (blue), for Methods see [1,2].

A) Action potential (AP) and B) afterhyperpolarisation (AHP) duration to 80% recovery. Differences between all Field and MPR neurons were highly significant in A) and B). C) AP duration versus AHP duration

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Although there is a small overlap in these properties (C), most are in one group or the other. Here we include only those fully identified during the experiment and recorded as Field-type 1 or Field type 2.

The comparison was made against A $\beta$ -MPRs rather than all A $\beta$ -nociceptors, because some properties of A $\beta$ -MPRs show a less extreme nociceptive phenotype than other A $\beta$ -nociceptors [1] and are thus most likely to have properties overlapping with those of any A $\alpha\beta$ -LTMR subgroup. However, their small overlap suggests that even A $\beta$ -MPR and Field-A $\alpha\beta$ -LTMRs are two distinct groups of afferents.

\*NB Because of the time taken to distinguish between them and because our focus was mainly on nociceptors, some units were grouped as F/G (Field or G hair) during the experiments. Although many were fully identified during experiments, they were grouped as G hair/Field in most of our publications because we saw no electrophysiological difference between these groups when fully identified.

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2. Fang X, McMullan S, Lawson SN, Djouhri L: **Electrophysiological differences between nociceptive and non-nociceptive dorsal root ganglion neurones in the rat *in vivo*.** J Physiol 2005, 565:927-943.
3. Horch KW, Tuckett RP, Burgess PR: **A key to the classification of cutaneous mechanoreceptors.** J Invest Dermatol 1977, 69:75-82.