

## Meloxicam, HRP conjugate

DAG1223

Lot. No. (See product label)

### PRODUCT INFORMATION

|                            |  |
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| <b>Product overview</b>    | Meloxicam, HRP conjugate   |
| <b>Antigen Description</b> | Non-steroidal anti-inflammatory drugs, usually abbreviated to NSAIDs or NAIDs, are drugs with analgesic, antipyretic and, in higher doses, anti-inflammatory effects - they reduce pain, fever and inflammation. Most NSAIDs act as nonselective inhibitors of the enzyme cyclooxygenase, inhibiting both the cyclooxygenase-1 (COX-1) and cyclooxygenase-2 (COX-2) isoenzymes. Cyclooxygenase catalyzes the formation of prostaglandins and thromboxane from arachidonic acid. Prostaglandins are short-lived substances made from fatty acids that play a role in many body functions. They influence pain signals, regulation of inflammation, maintenance of tissues such as the lining of the stomach, blood clotting and stimulation of cells into action. In whole the NSAIDs prevent the prostaglandins from ever being synthesized, therefore reducing or eliminating the pain. |
| <b>Source</b>              | NSAIDs   |
| <b>Conjugate</b>           | HRP  |
| <b>Form</b>                | concentrate  |
| <b>Characteristic</b>      | Each conjugate comprises antigen covalently bound to horseradish peroxidase and is suitable as a tracer in immunoassay development   |

### PACKAGING

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| <b>Storage</b> | Can be stored at 2-8°C for up to 3 months and at -20°C for longer term storage. |
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### BACKGROUND

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| <b>Introduction</b> | Meloxicam inhibits cyclooxygenase (COX), the enzyme responsible for converting arachidonic acid into prostaglandin H <sub>2</sub> -the first step in the synthesis of prostaglandins, which are mediators of inflammation. Meloxicam has been shown, especially at its low therapeutic dose, selectively to inhibit COX-2 over COX-1. Meloxicam concentrations in synovial fluid range from 40% to 50% of those in plasma. The free fraction in synovial fluid is 2.5 times higher than in plasma, due to the lower albumin content in synovial fluid as compared to plasma. |
| <b>Keywords</b>     | Meloxicam; 4-hydroxy-2-methyl-N-(5-methyl-2-thiazolyl)-2H-1,2-benzothiazine-3-carboxamide-1,1-dioxide; MOBIC; Meiloxicam; MeloxicamBp2003; CH83850; Mobicox; Movalis; Movatec; Parocin   |

### REFERENCES

1. Wojtulewski, JA; Schattenkirchner, M; Barceló, P; Le Loët, X; Bevis, PJR; Bluhmki, E; Distel, M. "A Six-Month Double-Blind Trial to Compare the Efficacy and Safety of Meloxicam 7.5 mg Daily and Naproxen 750 mg Daily in Patients with Rheumatoid Arthritis". Rheumatology 35, Supplement 1: 22-8.
2. Off-label use discussed in: Arnold Plotnick MS, DVM, ACVIM, ABVP, Pain Management using Metacam, and Stein, Robert, Perioperative Pain Management Part IV, Looking Beyond Butorphanol, Sep 2006.