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### 6-(Methylsulfinyl)hexyl Isothiocyanate Isolated from Wasabi (*Wasabia japonica* MATSUM) Suppresses Tumor Progression in an Experimental Mouse System

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We examined the anti-metastatic effect of 6-(methylsulfinyl)hexyl isothiocyanate (6-MITC) isolated from wasabi (*Wasabia japonica* MATSUM). Pulmonary micrometastasis was quantified using a dependable method to detect the human c-Ha-ras gene, which was carried in the tumor cell line. Mice belonging to the S-1 group were administered 6-MITC continuously for 35 days from the time of tumor cell inoculation, and S-2 group mice were administered 6-MITC for 21 days from the day of amputation. Oral administration of 200  $\mu\text{M}$  6-MITC solution was effective in preventing metastasis of the experimental tumor. In the S-1 group, 7 out of ten experimental mice have lungs carrying no detectable human c-Ha-ras gene. Amplified human c-Ha-ras bands were detected in only the lungs of three mice; in these, the metastatic indexes of the lungs were respectively 0.60, 0.70 and 0.90. In the S-2 group, the bands were detected in four lungs of 5 experiments, with the metastatic indexes of the lungs in the range 0.36–0.72. Starting the treatment at the time of tumor cell inoculation was more effective in preventing metastasis than beginning the treatment on the day of amputation.

**Keywords:** [6-\(methylsulfinyl\) hexyl isothiocyanate \(6-MITC\)](#), [wasabi](#), [tumor metastasis](#),  
[r/mHM-SFME-1 cell line](#)



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