

## Supplementary Information: Full Western Blots

### Immunoproteasome subunit $\beta 5i$ /LMP7-deficiency in atherosclerosis

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<sup>2</sup>DZHK (German Center for Cardiovascular Research), partner site Berlin, Germany

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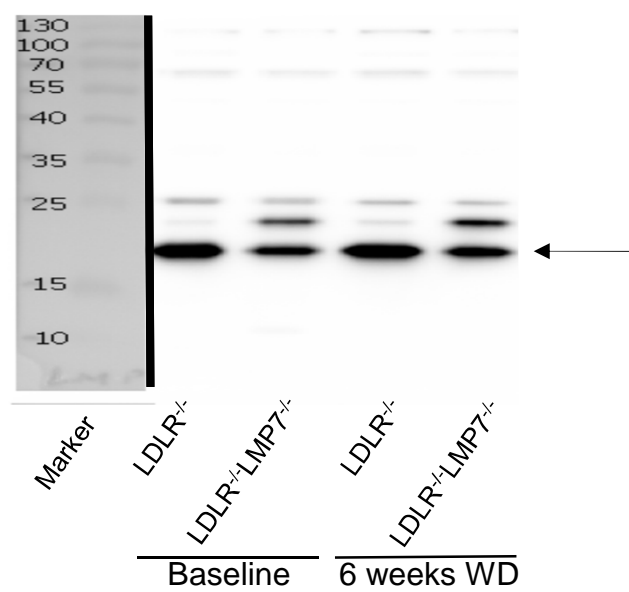
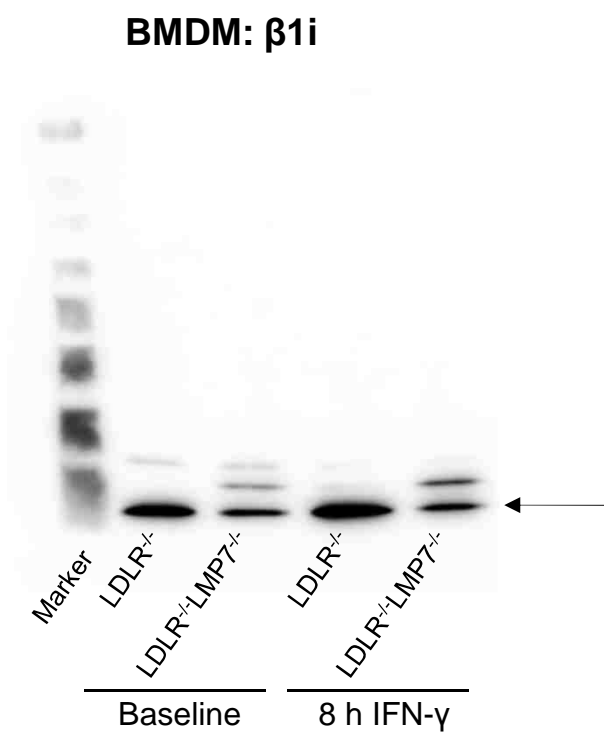
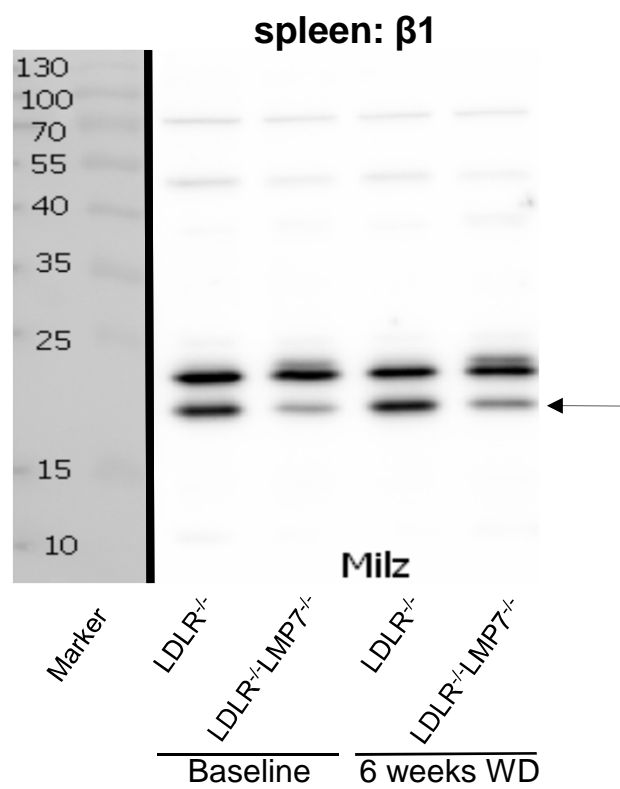
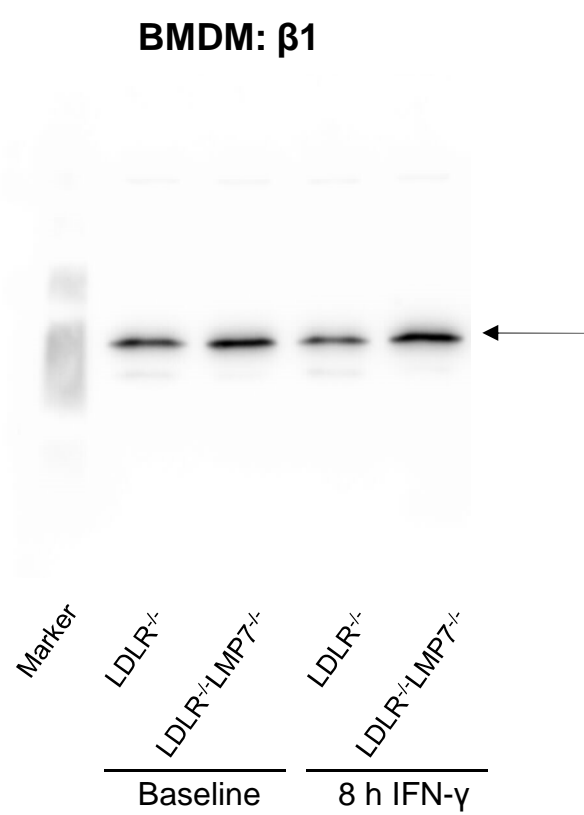
<sup>4</sup>DZHK (German Center for Cardiovascular Research), partner site Munich, Germany

<sup>5</sup>Institute of Pharmacology, Center for Cardiovascular Research, Charité-Universitätsmedizin Berlin, Berlin, Germany

<sup>6</sup>Experimental and Clinical Research Center, a joint cooperation of Max Delbrück Center for Molecular Medicine and Charité Medical Faculty, Berlin, Germany

<sup>7</sup>Berlin Institute of Health (BIH), Berlin, Germany

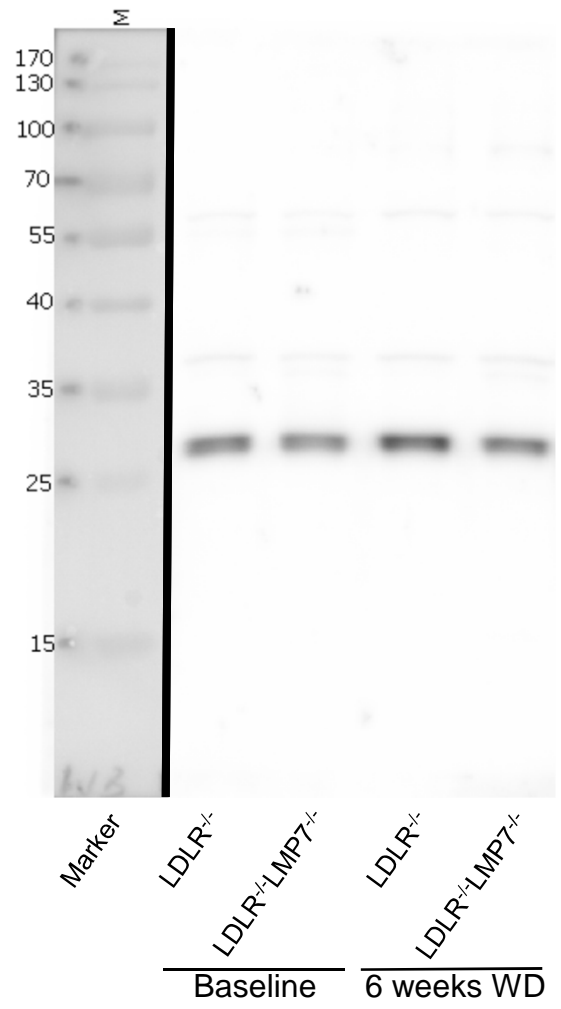
<sup>8</sup>Max Delbrück Center for Molecular Medicine in the Helmholtz Association, Berlin, Germany



**BMDM:  $\beta 2$**



**spleen:  $\beta 2$**

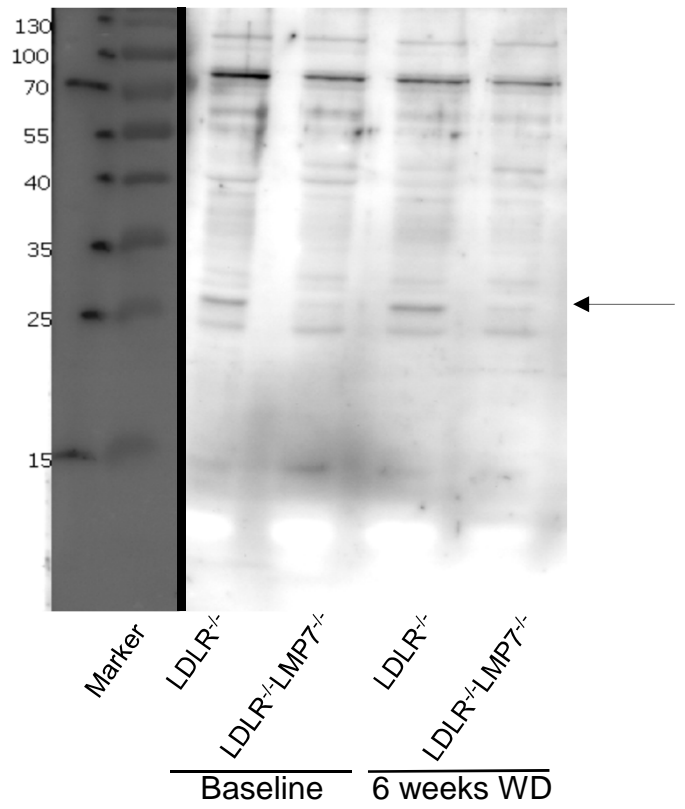


**BMDM:  $\beta$ 2i**



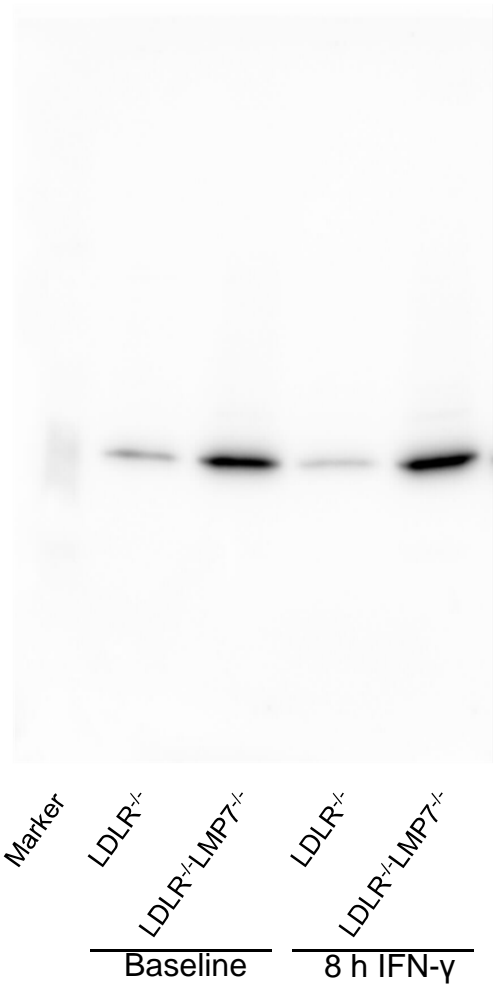
Marker  
LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>+/-</sup>  
LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>+/-</sup>  
Baseline 8 h IFN- $\gamma$

**spleen:  $\beta$ 2i**

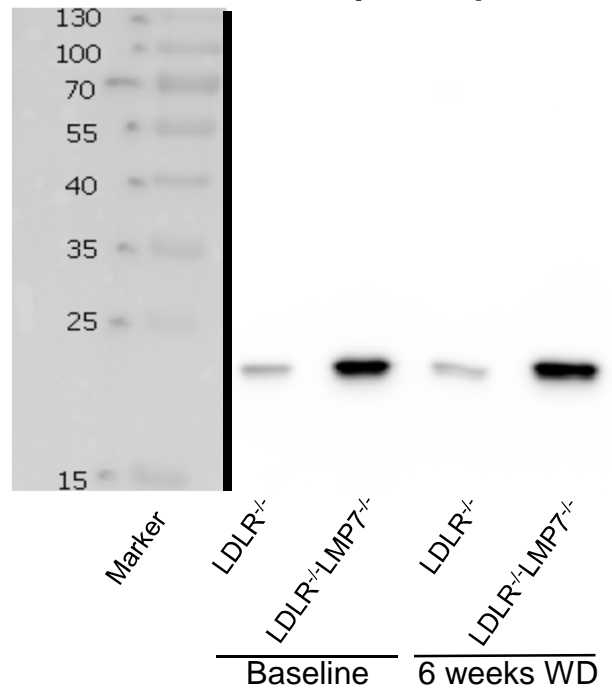


Marker  
LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>+/-</sup>  
LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>+/-</sup>  
Baseline 6 weeks WD

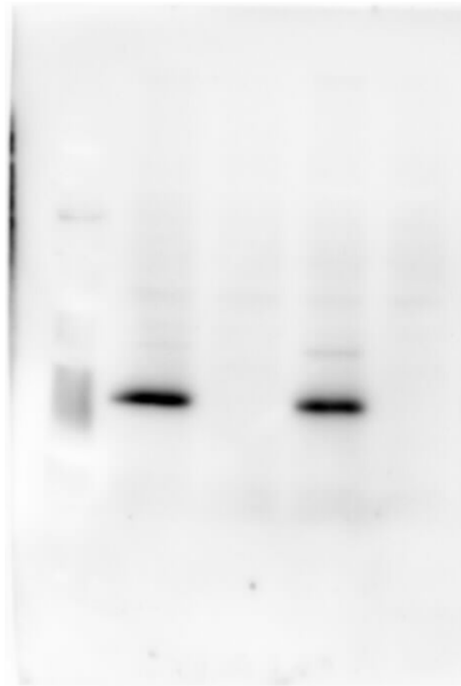
**BMDM:  $\beta 5$**



**spleen:  $\beta 5$**

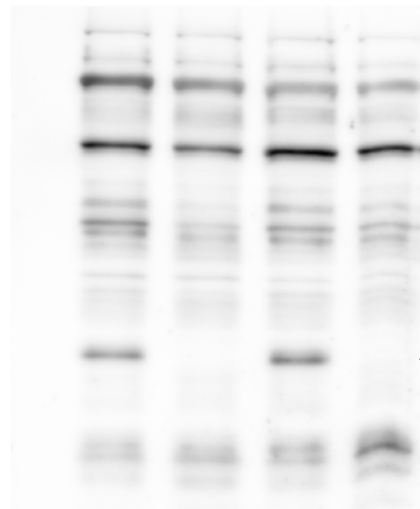


**BMDM:  $\beta 5i$**



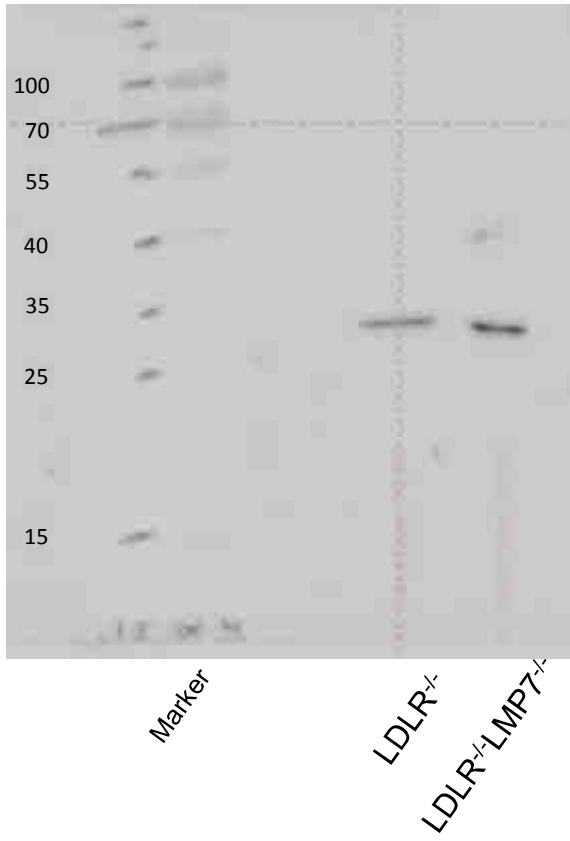
Marker  
LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>+/-</sup>  
LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>+/-</sup>  
Baseline 8 h IFN- $\gamma$

**spleen:  $\beta 5i$**

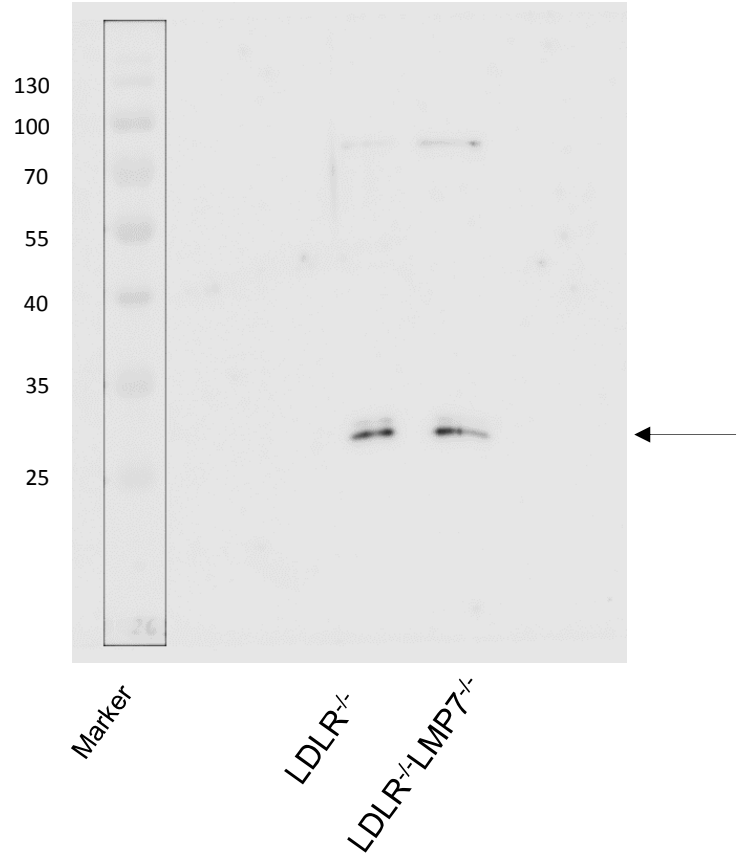


LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>+/-</sup>  
LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>+/-</sup>  
Baseline 6 weeks WD

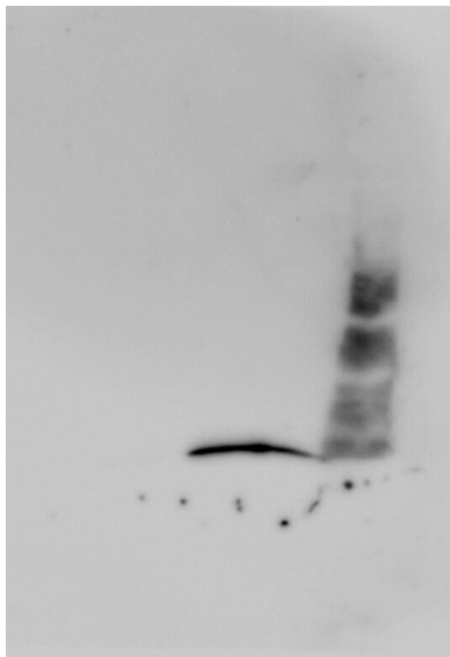
**26S BMDM:  $\alpha 4$**



**26S spleen:  $\alpha 4$**

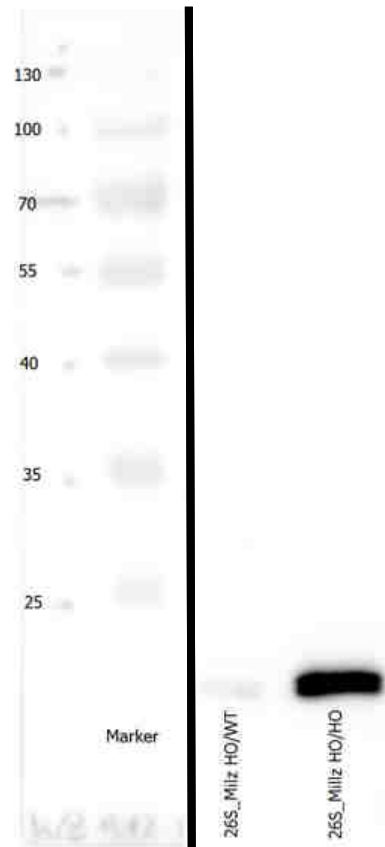


26S BMDM:  $\beta 5$



LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>-/-</sup>  
Marker

26S spleen:  $\beta 5$

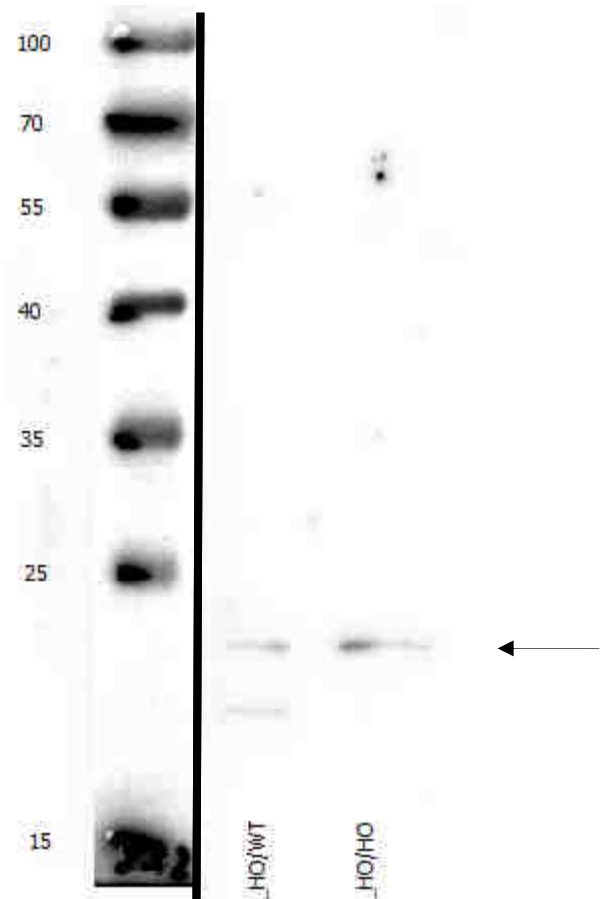
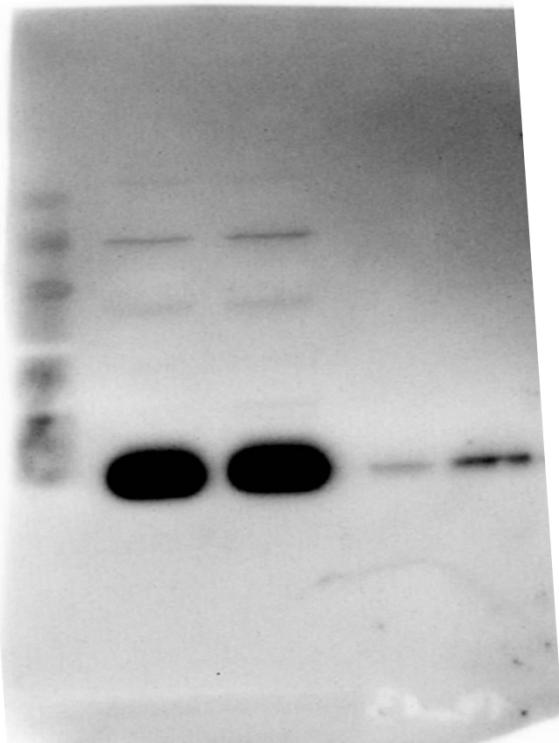


Marker  
LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>-/-</sup>  
26S\_Milz HO/WT  
26S\_Milz HO/HO



26S BMDM:  $\beta 1$

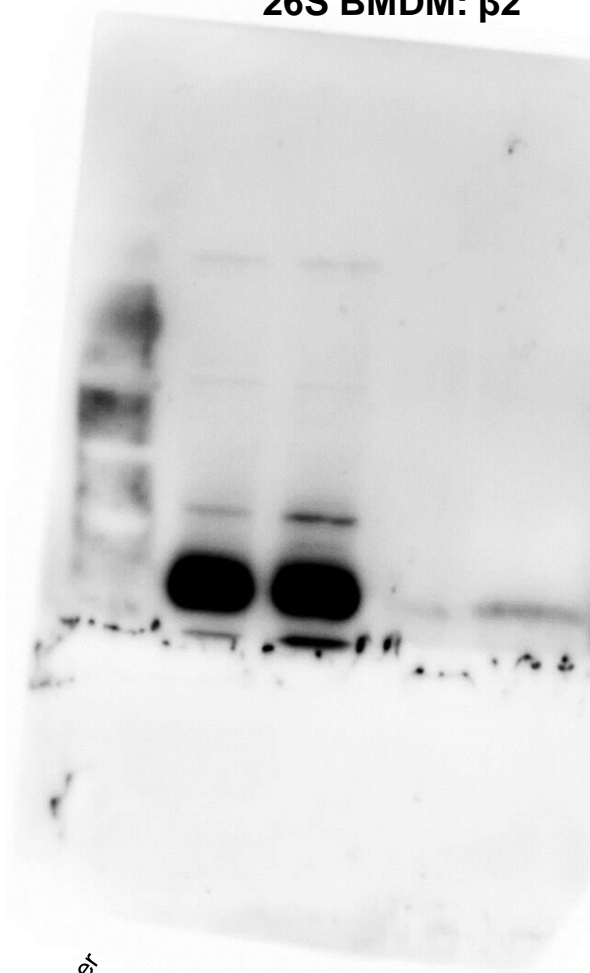
26S spleen:  $\beta 1$



Marker  
positive controls  
LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>-/-</sup>

Marker KDa  
26S\_Milz\_HO/WT  
26S\_Milz\_HO/HO  
LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>-/-</sup>

26S BMDM:  $\beta 2$



Marker

positive controls

$LDLR^{-/-}$

$LDLR^{-/-}LMP7^{-/-}$

26S spleen:  $\beta 2$



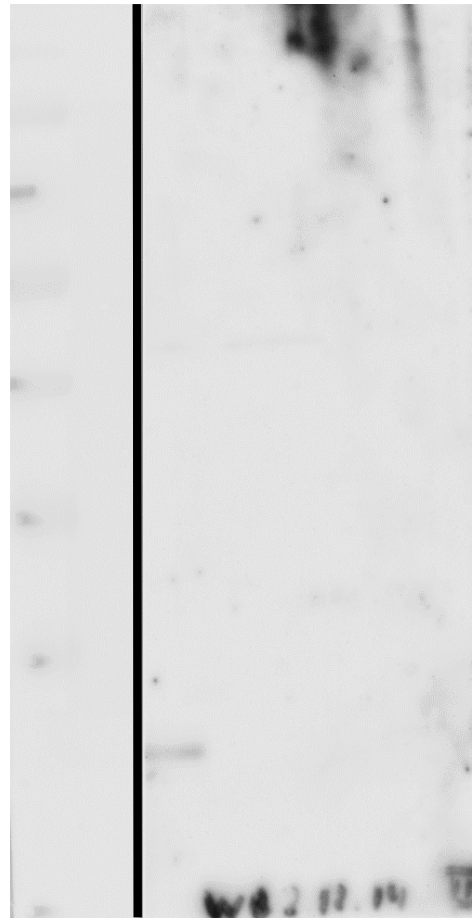
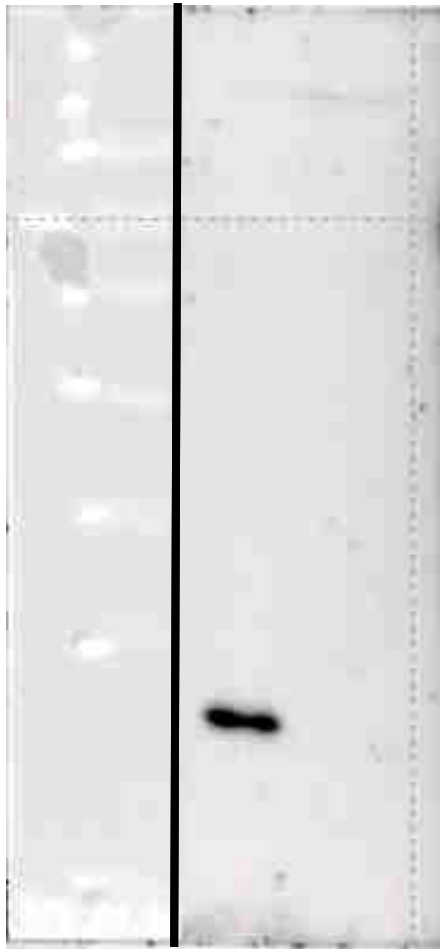
Marker

$26S\_Milz\_HO/WT$

$26S\_Milz\_HO/HO$

26S BMDM:  $\beta 5i$

26S spleen:  $\beta 5i$



Marker

LDLR<sup>-/-</sup>

LDLR<sup>-/-</sup>LMP7<sup>-/-</sup>

Marker

LDLR<sup>-/-</sup>

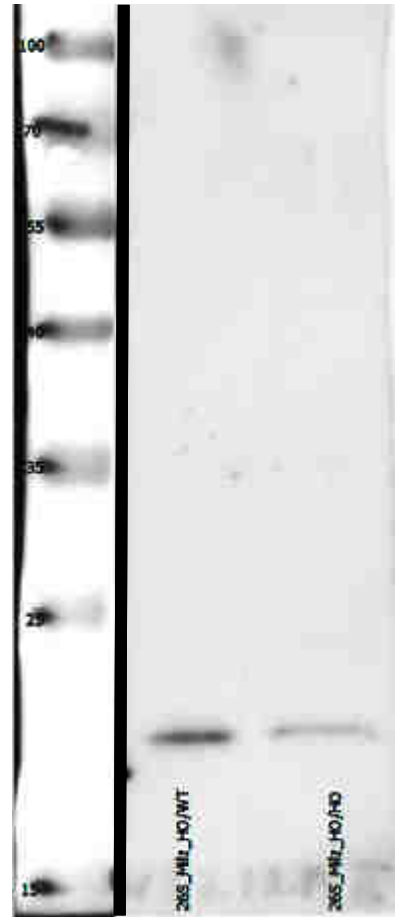
LDLR<sup>-/-</sup>LMP7<sup>-/-</sup>

26S BMDM:  $\beta 1i$



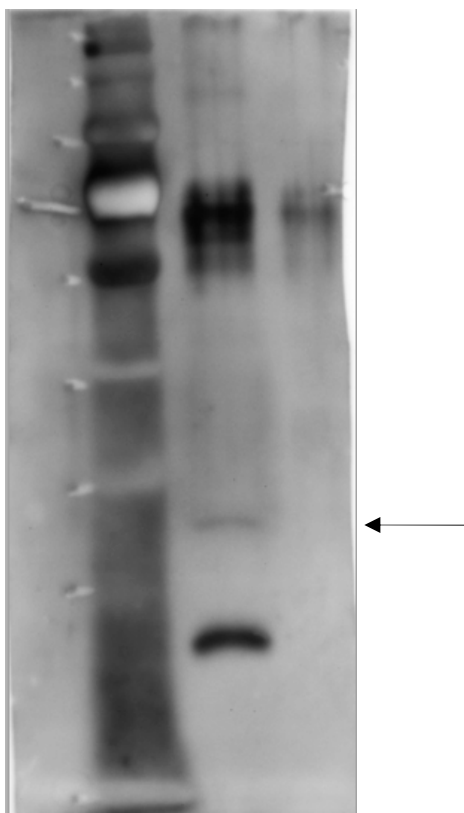
Marker  
positive controls  
LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>-/-</sup>

26S spleen:  $\beta 1i$



Marker  
LDLR<sup>-/-</sup>  
LDLR<sup>-/-</sup>LMP7<sup>-/-</sup>

**26S BMDM:  $\beta$ 2i**  
(~26 kDa)

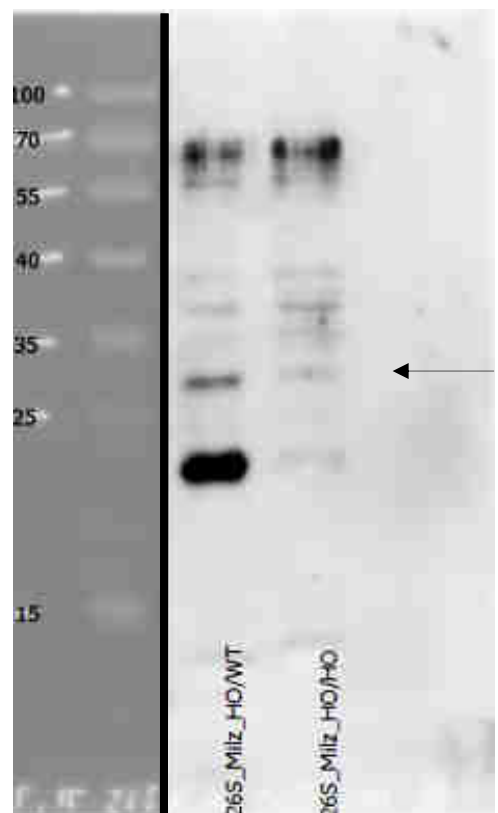


Marker

LDLR<sup>-/-</sup>

LDLR<sup>-/-</sup>LMP7<sup>-/-</sup>

**26S spleen:  $\beta$ 2i**  
(~26 kDa)



Marker

LDLR<sup>-/-</sup>

LDLR<sup>-/-</sup>LMP7<sup>-/-</sup>