


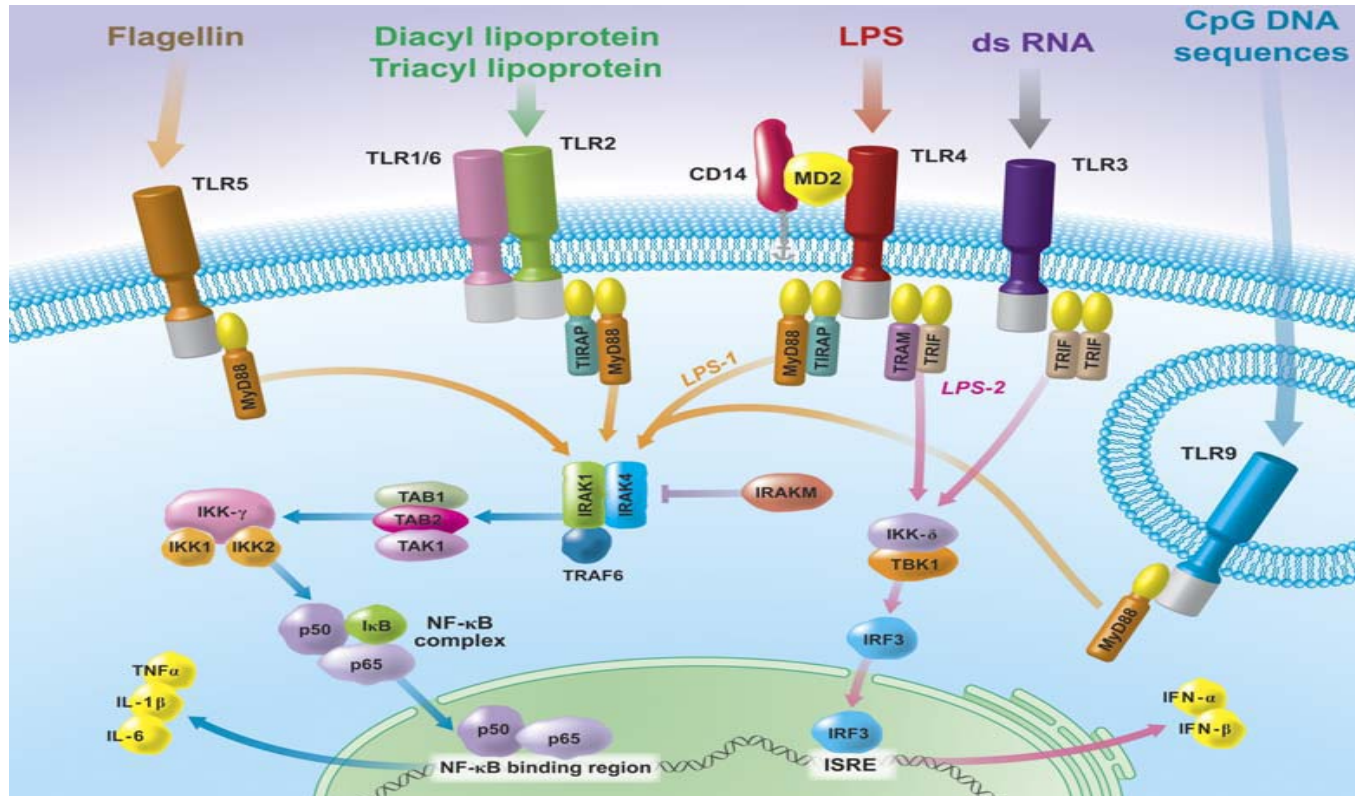
PIASy, a negative regulator of Toll like receptor signaling

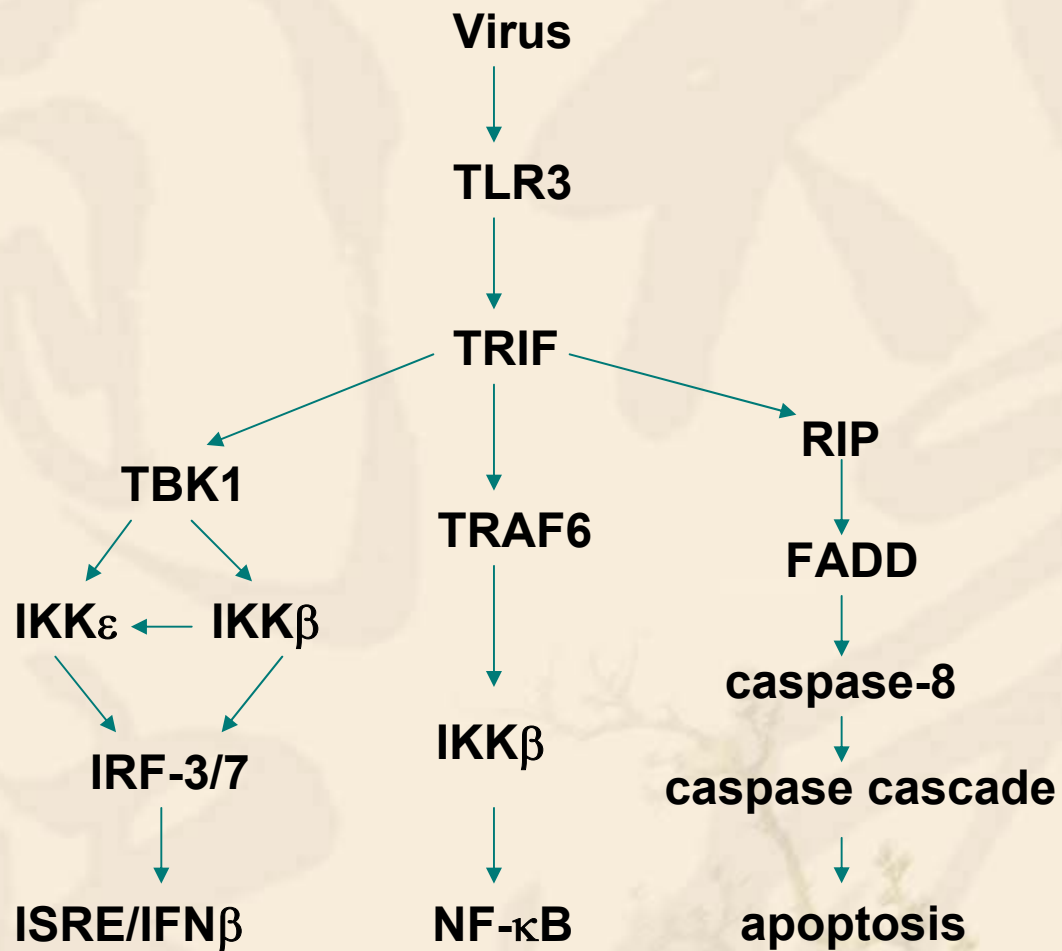
Jun Zhang

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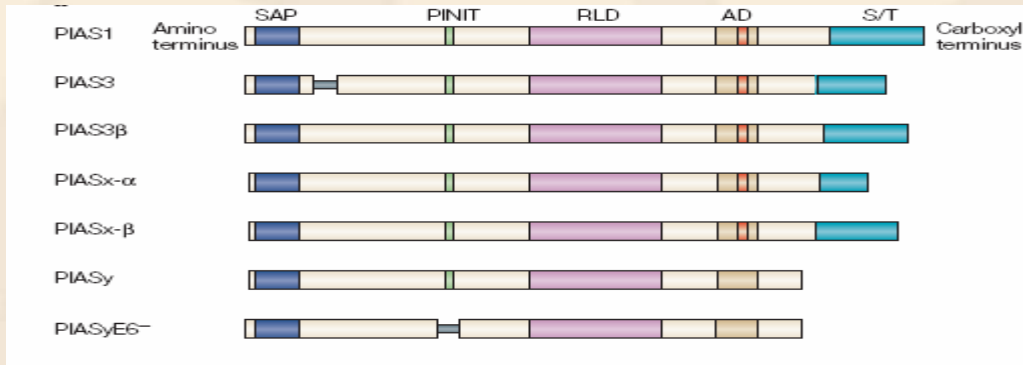
Toll like receptor signaling



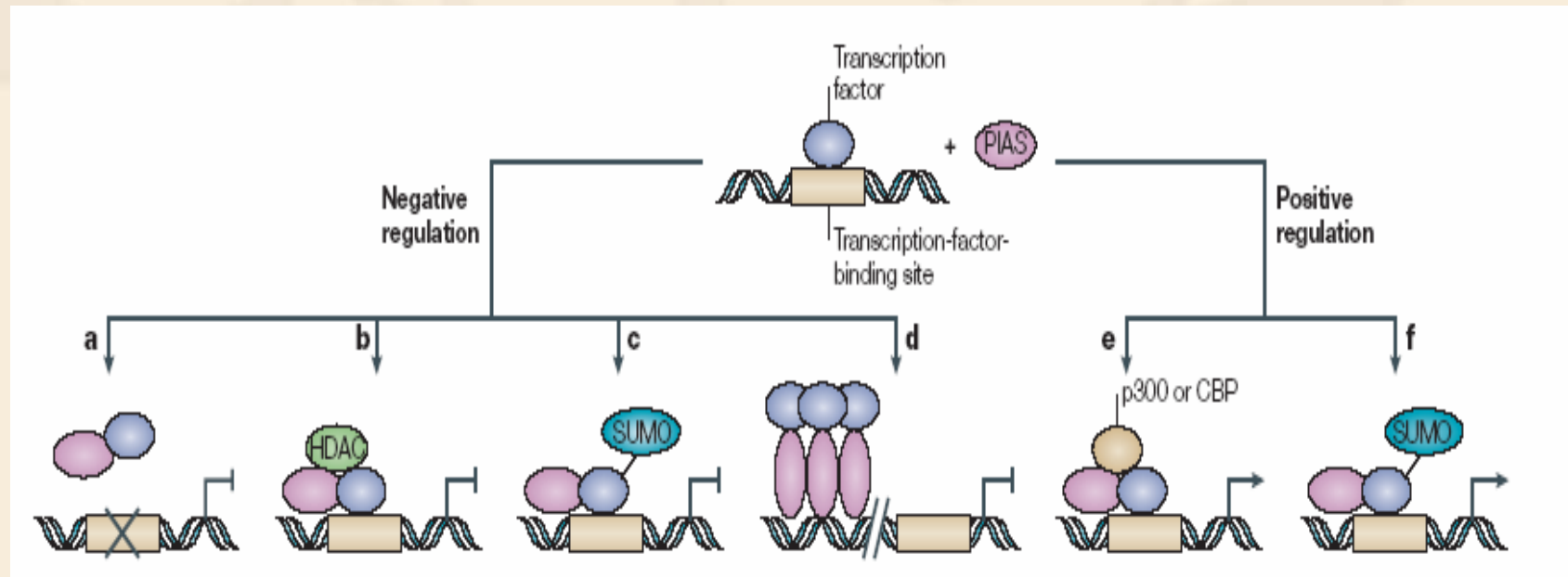


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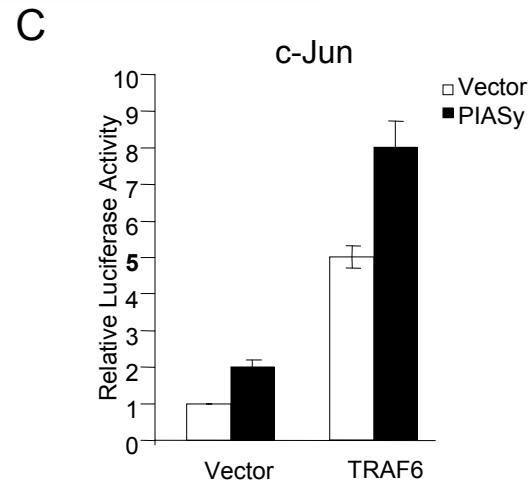
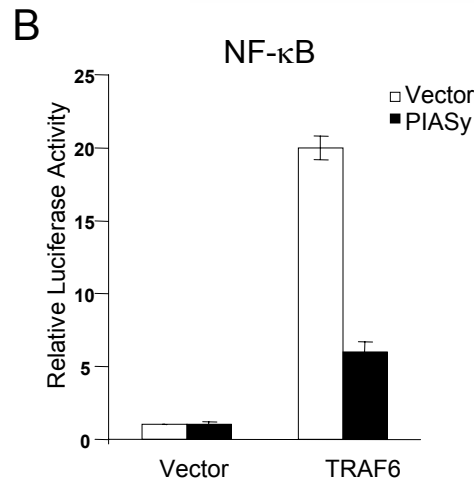
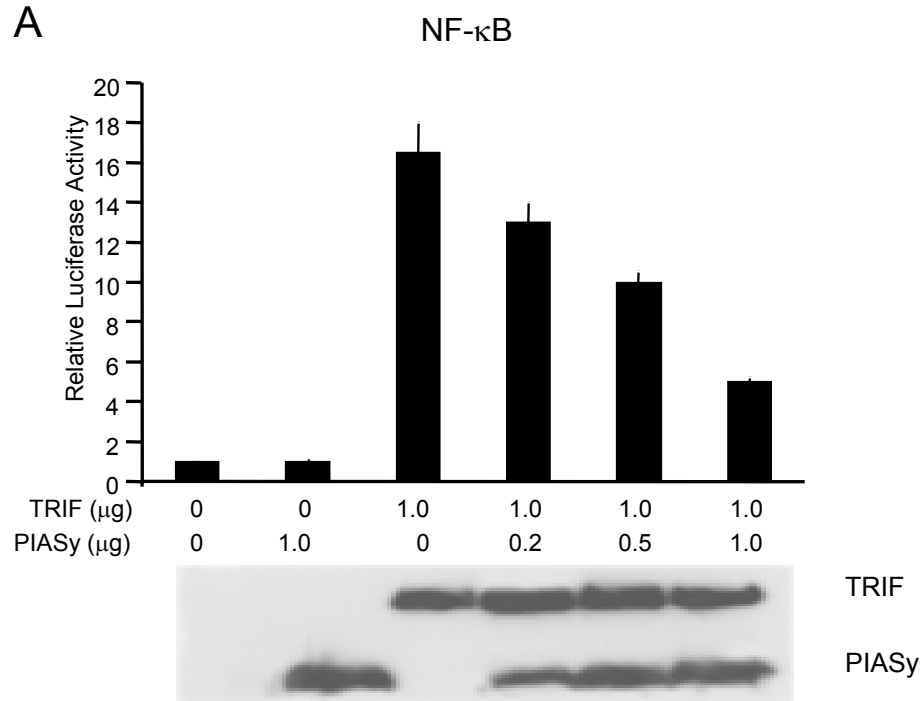
PIAS family members and proposed mechanisms of transcriptional regulation



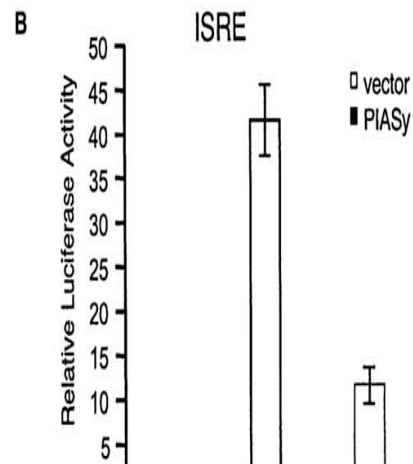
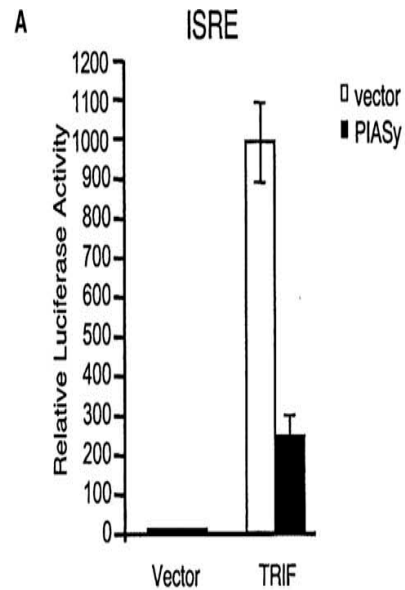
PIAS: protein inhibitors of activated STAT



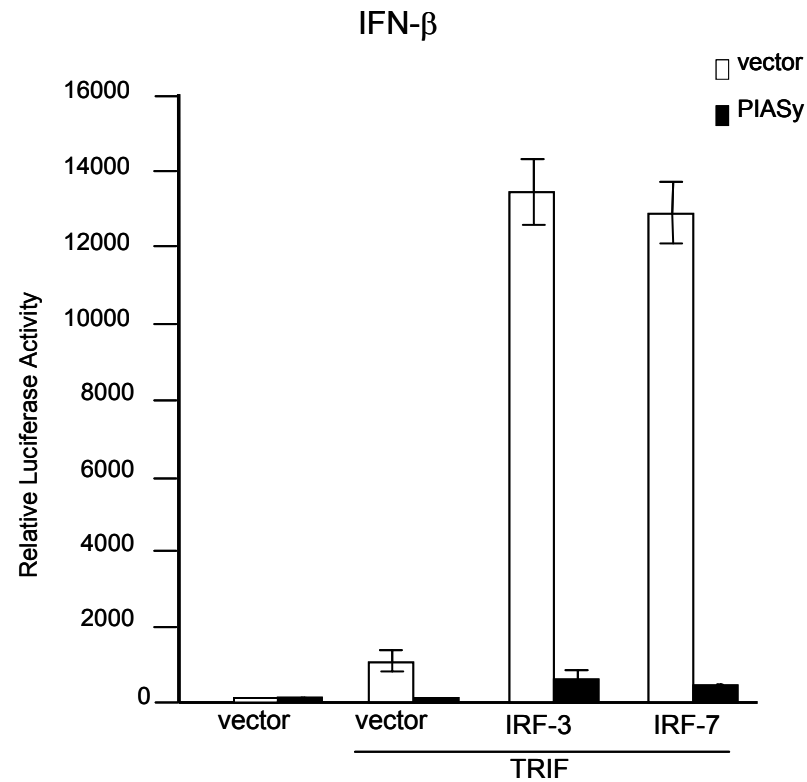
PIASy inhibits TRIF- and TRAF6-induced NF- κ B



PIASy inhibits TRIF-, IRF-3-, IRF-7- and Sendai virus-induced ISRE activation

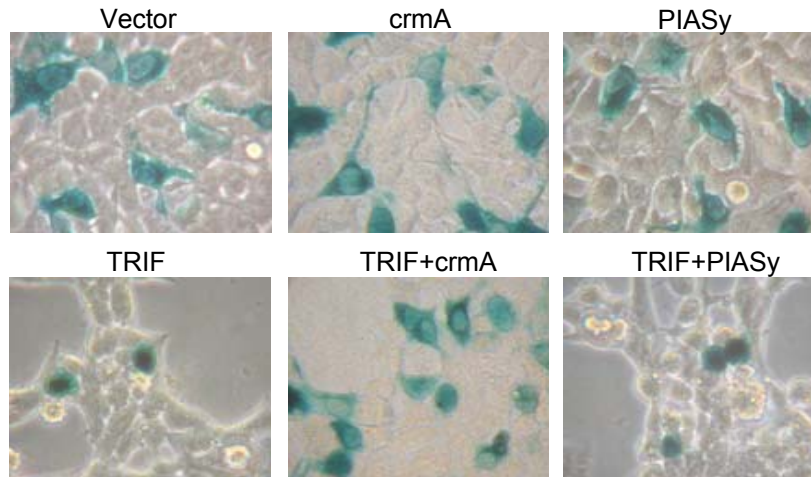


PIASy inhibits TRIF-induced IFN- β activation

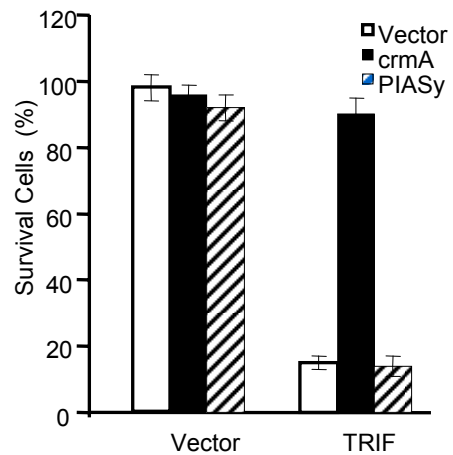


PIASy has no effects on TRIF-induced apoptosis

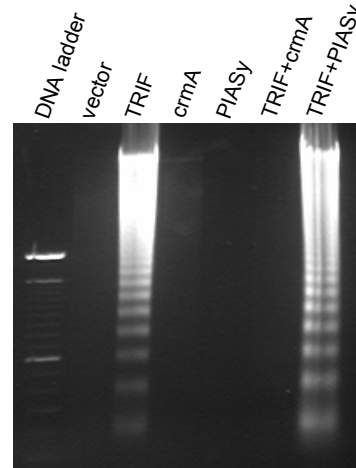
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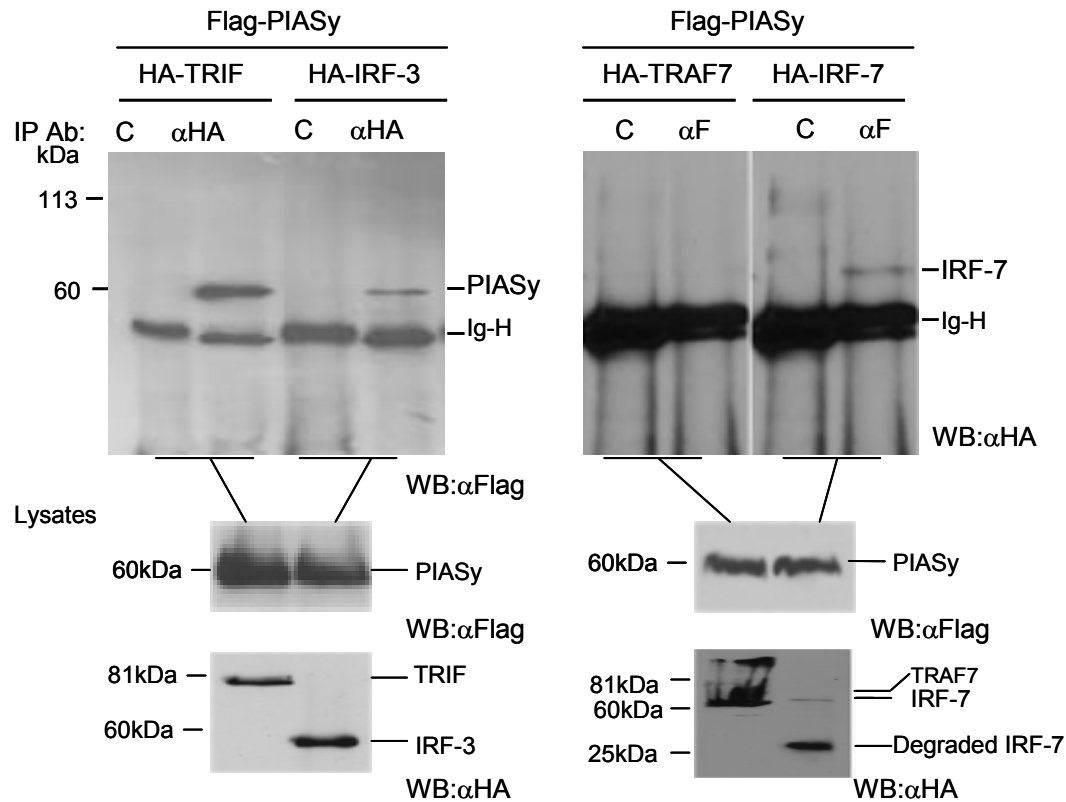
B



C



PIASy interacts with TRIF, IRF-3 and IRF-7 in mammalian cells



Conclusion

PIASy interacts with TRIF, IRF-3, IRF-7 and inhibits TRIF-induced ISRE and NF- κ B activation but not apoptosis.

Implication

PIASy may serve as a potential therapeutic target for inflammatory disease.

Next

Possible Mechanism?

1. Block DNA binding activity?
2. Promote sumoylation of the target proteins?



Thank you!

